

THE BRICKBUILDER

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THE BRICKBUILDER.

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ARCHITECTURE AND BUSINESS.

THE last twenty-five years has witnessed so complete and fundamental a transformation in the practice of architecture that we sometimes fail to fully realize the changed conditions and we very much doubt whether the younger men who are coming into the profession every year in such numbers altogether grasp the significance of the tasks which are to be imposed upon them. The architect of the past generation was a man of relatively limited opportunities and the demands upon him were far less than what is now expected of an ordinarily good draughtsman. It is very easy to misunderstand the architect's work of to-day and to misinterpret the popular demand, but if there is any one quality which seems to be imperatively required of a successful architect with even ordinary practice, it is business ability. Of course business ability by itself does not mean success any more than does constructive or designing ability, but an architect must be a ruler of men. He, in the very nature of his calling, is obliged to decide quickly and promptly questions involving not merely large amounts of money, but principles of justice and equity,

and frequently matters which involve very fine law points as well. He must be the business manager for his client, and the thousands of dollars which are disbursed through him must be expended economically, and yet with no false economy, and every cent must be rigidly accounted for. We know of one architect who for a number of years has had an average business of nearly one hundred thousand dollars per day. That amount of money he has to disburse. He must see that a dollar's worth of work is returned for a dollar's worth of money, that the accounts are kept straight, and that the work itself is carried forward in a prompt and businesslike manner. Of course an amount of business of this kind is extraordinary, but there are a great many architects whose business has run up to five thousand dollars a day, and to properly care for a business of this sort requires more than ordinary business ability. This is the very point upon which our present systems of architectural education are weak. Our students are most thoroughly drilled in design, and often in the exacting requirements of science. Then their practical experience is usually limited to toiling over a drawing-board in an architect's office, where, to be sure, they see tangible results but almost nothing of the business machinery which is so important a factor in the production of these results. Consequently, when the young man starts in business the chances are ten to one that his business training will be wholly inadequate to large and sudden responsibilities. When the emergency arises he will often be found wanting, and it is this fact more than any other single feature which causes real estate men, builders and property owners to be distrustful of architects' figures and methods. There are many exceptions to this list and there are architects who are the keenest and shrewdest of business men, but the fact that they are exceptions shows that the rest are far below them, though it also shows what an architect might be.

So far as we know there has never been any attempt made in the schools to teach the business of architecture. We are not saying that it would be altogether practicable, but that it is desirable cannot be questioned for a moment. We cannot go backward. The scope of the profession has enlarged and the individuals must enlarge with it or take a back seat. In business habits the builders as a class are far more fitted for their work than the architects. We do not believe this state will continue; methods will crystallize, will become better known, and the architects of future generations will profit by our own failures and our own shortcomings, but in the meantime the architect is at a constant disadvantage. The dreamy idealist who cannot bring his mind to practical dollars and cents is just as far astray as the shrewd, smart,

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hustling business architect who despises art. Neither is the right sort, but a combination of the two interests is not only imperatively necessary, but it is bound to come about in the course of a very few years. There are too many intelligent men in the profession to-day studying and working hard and thinking of how they can best, most successfully and most economically carry out their business, to let the problem stay long unsolved by the great majority; and just as the few are now so well equipped from a business standpoint, so will, in a few years, the profession as a whole rise to the imperative demands for shrewd, hard common sense allied to the creative ability and the constructive, scientific execution.

The lack of good business ability is, to our mind, the most serious shortcoming of the profession to-day and one of which the continuance will entail the gravest dangers. It is perfectly possible to imagine a combination of keen, sensitive, well-balanced artistic ability with shrewd, practical, common-sense business methods. Such a combination is extremely rare, but it is the rare combinations which succeed in this world, and the architect who ignores the fact that his art is also a most exacting business is pretty likely one of these days to find himself in with the majority of the unemployed.

LONDON OFFICE BUILDINGS.

THE account of the attempt to promote an American office building in London is very interesting reading. Englishmen do not like it when Americans suggest that the old-world methods can be improved upon, but some of the difficulties encountered in London by the parties who recently attempted to put up a modern commercial building show that we at least do some things better here. A person taking a lease of an office in London apparently is supplied with nothing but the bare room. He puts in his own gas and electric wires. He keeps his coal in the cellar and pays the janitor for bringing it up. He has no hot water and no towels. In addition to his rental the tenant has to pay a proportion of the cost of maintenance of the building, and every time the windows are washed he gets a bill from the janitor. The elevator service, when any exists at all, is poor and irregular. In fact people do not hire offices in London, but rent chambers, and the office such as is understood in the best of the New York buildings does not exist at all on the other side of the ocean. And yet the rent for these chambers is not materially lower than the prices which obtain in New York and Boston. Then the absurd restrictions in regard to light and air embodied in the so-called laws of Ancient Lights, make it almost impossible to put up a new building without treading on some one's toes. Vested interests are about the most sacred thing in London, and the fact that a man has looked out of his window at the setting sun for a certain number of years gives him a proprietary right to all the atmosphere between him and the departing orb. At least that is what the doctrine amounts to in practice. There is one case on record where parties proposing a new building had to pay a sum of twenty thousand pounds before they could be allowed to obstruct their neighbor's light, though that obstruction was entirely limited to their own premises and their right to make such ob-

struction would not have been questioned anywhere except in London.

NEW BOOKS.

LETTERS AND LETTERING: A Treatise with Two Hundred Examples. By Frank Chouteau Brown. Boston: Bates & Guild Company, 1902. 8vo, \$2.

That lettering, mere lettering, forms the basis of one of the most thoughtful of arts as well as of one of the most elaborate and exact of sciences, we are apt to forget until brought face to face with such a volume as this of Mr. Brown's.

It is most compact, the only other treatise at all comparable with it in this respect being that by Edward F. Strange. Its author deals with letters, first as individuals, then as members of a family, *i. e.* the alphabet, and at the most, in their relation to the outside world of other letters, showing the etiquette, so to speak, that ought to obtain amongst the romans when approached by such distant connection as the italic or script, or such foreigners as black-letter forms. Only once in a while does a picture intrude itself, and even then such will always be found to appositely point a moral rather than to adorn a tale.

Such an attitude of stern repression toward all external things is a difficult one to maintain. In the short introductory note there occurs a pathetic paragraph which states that "in view of the practical aim of this treatise it has been deemed advisable to include a larger number of illustrative examples, rather than to devote space to the historical evolution of the letter forms."

Another noticeable feature is the absence of the old familiar, almost "stock" examples. Serlio we find, and Dürer, Tagliente, Lucas, and Foresti's beautiful, if hackneyed, black-letter title, but such a volume must needs include such examples, and for the rest there is an amazing amount of new material. Not only does Mr. Brown give us the latest thing in *bizarre* and *art nouveau*, by Olbrich and Eckmann, but he has also shown wonderful industry and enterprise in his own rubbings, reproducing these directly whenever possible, or carefully redrawing them when necessary; all this in addition to the mass of original work which falls of necessity to his pen. Yet the author seems to have relied but little on himself to illustrate certain tendencies, and so we have a large number of absolutely new illustrations from all over the world. A delightful page by George Auriol, done with the brush apparently; a few well-nigh perfect lines based on the Venetian type of Nicolas Jenson, by Claude Fayette Bragdon; a page of script by Bruce Rogers, which possesses all the suave flow of the best old French copperplate work; a reconstruction of Serlio's famous capitals by Albert R. Ross, which well justifies the tremendous labor it must have involved; two pages, by Maxfield Parrish, of that lettering which many of us consider the most subtly individual of its kind in modern use, as well as many other almost equally excellent and wholly new designs.

The author's criticisms and comments are invariably kindly and illuminating, though the final chapter, "To the Beginner," reads rather perfunctorily. If a reviewer must find fault, this is almost the only thing upon which to lay rude hands.

The Planning of Apartment Houses.

II.

BY WALTER H. KILHAM.

HOUSEKEEPING APARTMENTS.

TURNING now to the question of apartments arranged for complete housekeeping, we find their satisfactory arrangement to be a much more difficult matter. Proper provision has to be made for kitchen, pantries and dining-rooms and for the convenient and sanitary housing of servants, while the facilities for the reception of supplies and disposal of ashes and garbage add another element of complication, and the requirements as to air and sunshine are just as exacting as in the case of non-housekeeping apartments.

In general, not over two apartments can be entered from the same stair landing without injuring the sense of privacy which is the aim of every flat dweller. All families and their domestic life should be kept apart just as much as possible. The tendency of the ordinances in Boston and its vicinity is to restrict each bank of apartments to their own staircases with a solid party wall between each set of suites, but in New York this does not seem to be regarded as important. The entrance from the staircase hall to the apartment should be near the rooms which may properly be used for the reception of guests. Nothing is more disagreeable than to be conducted by one's host down a long narrow corridor, passing doors to dining-room, bedrooms and even kitchens, to a final destination in the parlor. This again does not seem to be regarded as any objection in New York, but Boston tenants would be pretty sure to rebel if their main door did not lead quite directly to the living rooms. When possible a sort of reception hall, or "foyer," should be arranged from which the other principal rooms may be entered. The "foyer" need not necessarily have outside light, but may profitably be paneled and have a fireplace or wall seat so as to present a cosy appearance, especially in the evening.

Having placed the parlor and library alcove at the front where they will command a view of the street and given them at least one fireplace suitable for burning wood, the location of the dining-room next commands our attention. The original Boston idea was to place this, together with the kitchen, at the rear, so as to get good outside light. This involved traversing a long, dark passage past the various chambers and offices, and was held by many to be a poor arrangement. At present the preferred plan is to place

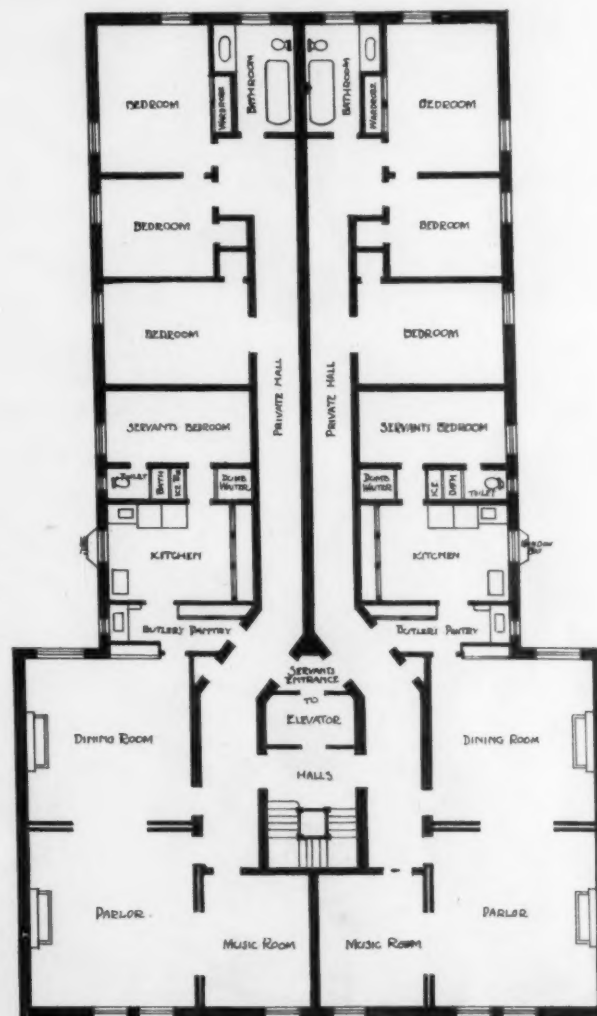
the dining-room near the front, opening by means of double doors from the parlor or "foyer," while the kitchens are just behind. The chambers being now placed at the rear, obtain more air and greatly increased privacy.

It is always well to have the bath rooms open from small lobbies between two chambers rather than from the main corridor, and considerable importance should be attached to their windows opening directly out of doors rather than into small wells which serve as flues to convey sounds and odors from one suite to another.

The service portion demands most careful consideration. The Boston law which requires two means of



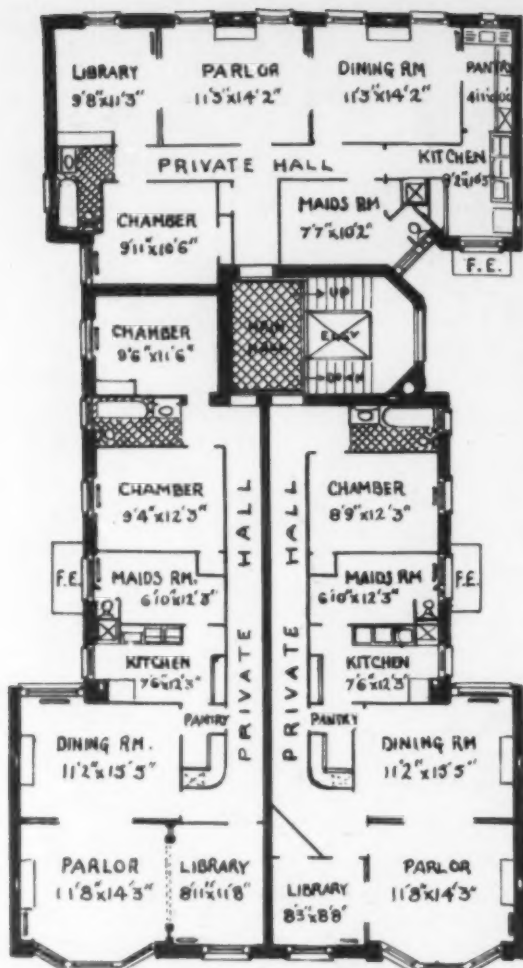
TYPICAL PLAN.
FIG. 1. "THE KEN-DRICK."



TYPICAL PLAN.
FIG. 2. "THE BEN HUR."

egress from each suite settles the question of the service staircase once for all; but many large New York houses are without this feature. In Boston this staircase is commonly enclosed in brick walls and the dumb waiter or service elevator runs in the well space. It should of course be located near the kitchen and preferably on the same side of the corridors.

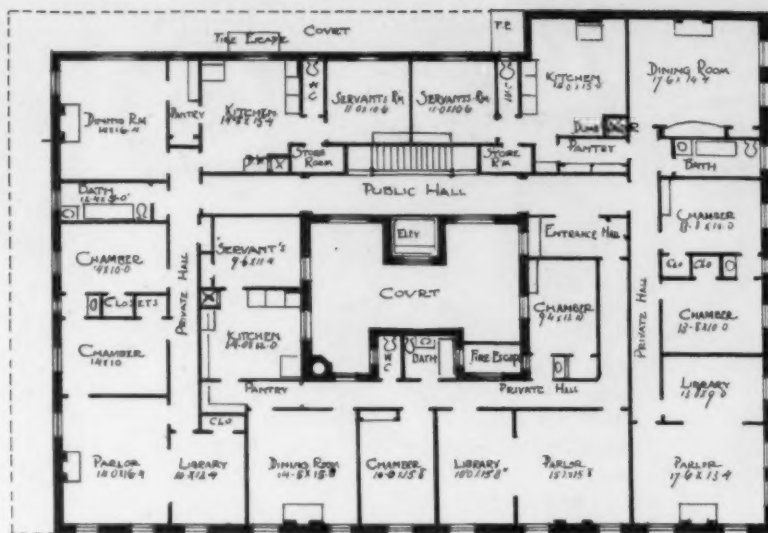
Formerly the servants' chambers were placed in the basement, along with the storerooms and fuel bins.



TYPICAL PLAN.

FIG. 3. "THE STERLING."

They were damp, cold and sunless in summer and, being often traversed by steam-heating mains, heated to suffocation in winter, and were sometimes even without windows. In some instances the floor space of these dens was further reduced by soil pipes running near the floor. Owing more to the attitude taken by the serving people themselves than to any humanitarian impulse on the part of the builders, servants' chambers are now generally placed on the same floor with the rest of the rooms. The advantages of this arrangement to the employer are many. The movements of the servants are under better control, they are never out of reach and their incentives to neatness are greater. The difficulty is to provide servants' bath rooms for the medium-priced suites which can be shared by the servants of several families. A makeshift, not entirely satisfactory, is to place a bath room in the basement. In some houses the servants are collected in the roof story, which is a long step in advance from their basement quarters, but not equal in convenience to the same-floor arrangement, and in this case bathing facilities

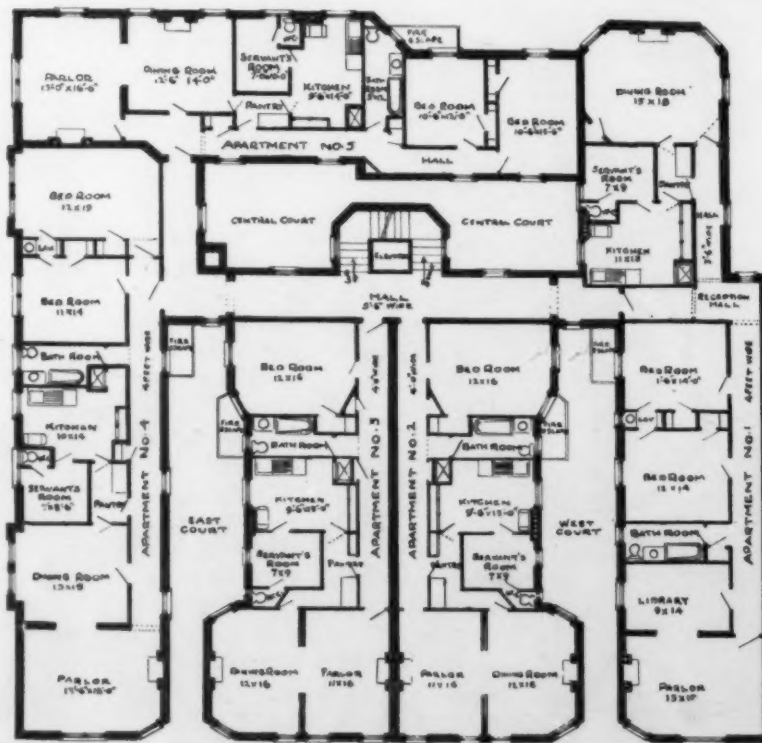


TYPICAL PLAN.

FIG. 4. "THE CASCADE."

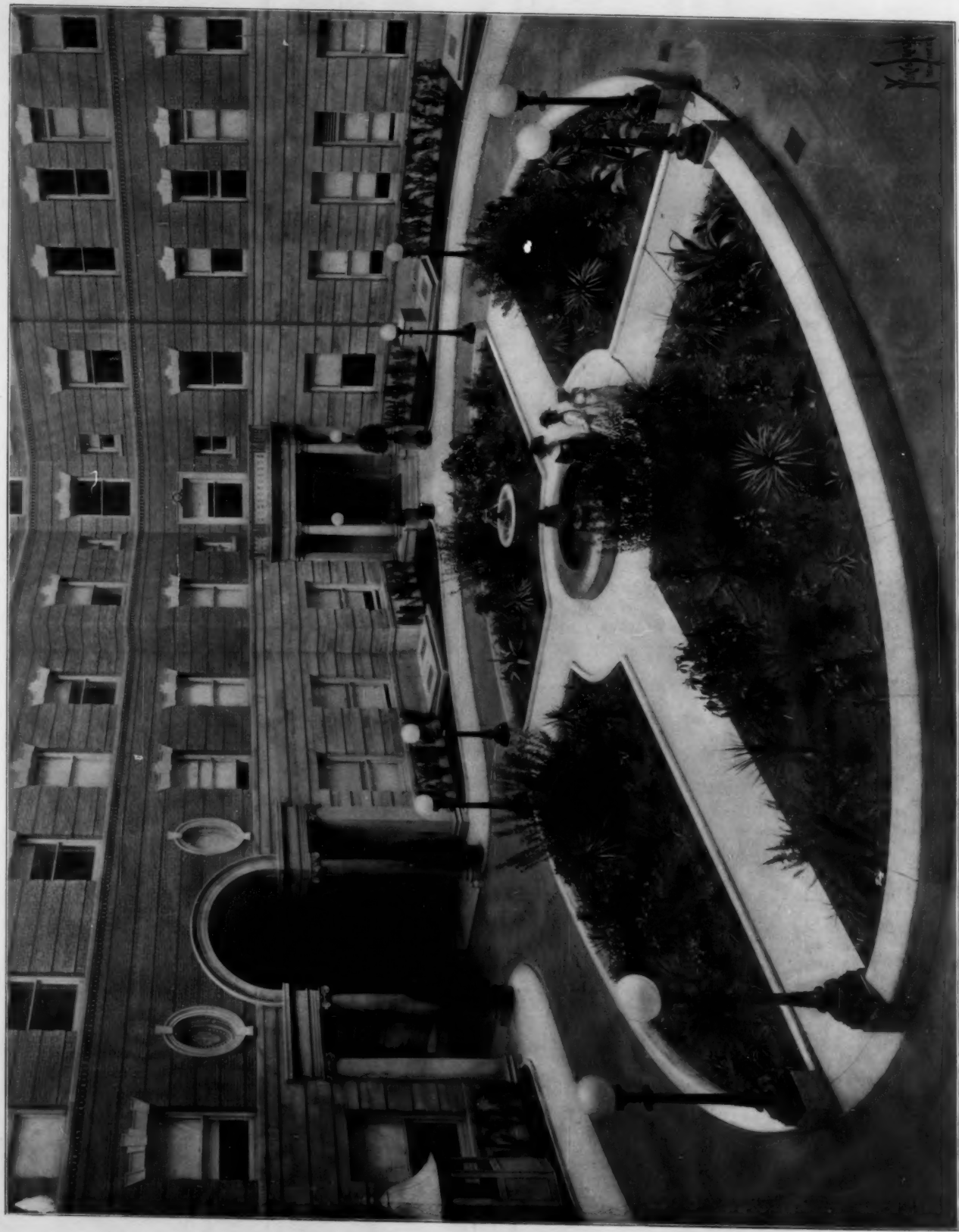
are easily supplied. The present New York practice in suites renting up to \$1,200 per year seems to be to provide a single water-closet opening from the servants' room, and in some praiseworthy instances a little more room is taken and a small bath tub installed as a sort of compromise. A common practice appears to be to open the servants' room direct from the kitchen, but the writer would prefer to have it entered from the corridor or a lobby.

A place for the refrigerator must be found near the service entrance, and the dumb waiter must have a place when not enclosed in the rear stairs. The practice of having it open directly in the kitchens themselves is highly objectionable, bringing, as it does,



TYPICAL PLAN.

FIG. 5. "THE ST. GERMAINE."

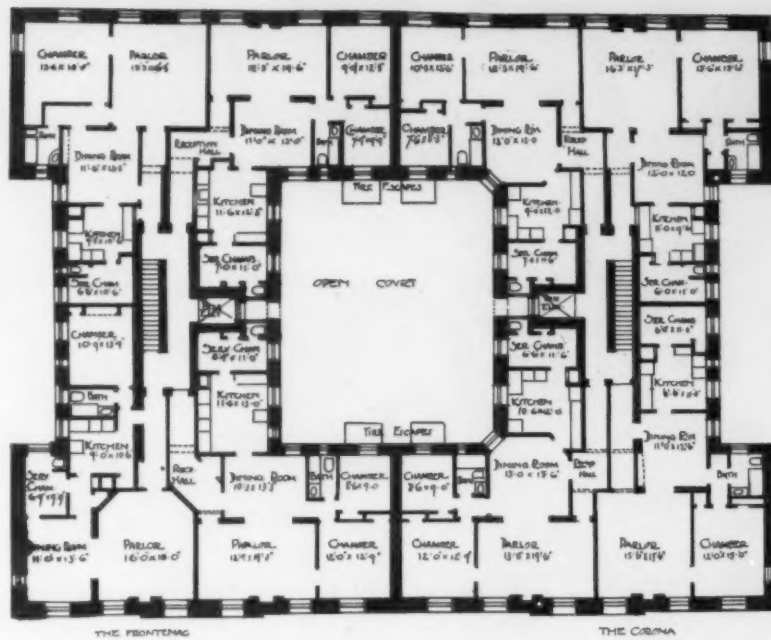


INTERIOR COURT, GRAHAM COURT APARTMENTS, NEW YORK CITY. Clinton & Russell, Architects.

the mingled doors of cooking from all the other apartments.

Figure 1 is an example of the treatment on a narrow lot. As in many other New York houses there is no rear staircase. The suite is entered near the front and a rudimentary foyer exists. The service portion is good with the exception of the dumb waiter, which would be better if approached from the corridor.

Figure 2 shows a treatment on a double New York lot and is an unusually good arrangement in every way, worthy of careful study.



TYPICAL PLAN.

FIG. 6. "THE FRONTENAC" AND "THE CORONA."

ground and are interesting studies in apartment house planning. Figure 6 in particular is recommended by a prominent real estate agent as being a popular type of suite which could be rented as fast as built, for rentals of from \$480 to \$720. These houses provide elevator service, porcelain sinks, tubs, etc., basement laundries with steam-drying apparatus, telephones, birch and oak trim, tiled bath rooms with showers, and various other very modern conveniences.

Figures 7 and 8



FIRST FLOOR PLAN.



TYPICAL FLOOR PLAN.

FIGS. 7 AND 8. "THE DORILTON."

Figure 3 is an arrangement for providing three suites on each floor on a double lot.

Figures 4, 5 and 6 are treatments on large plots of

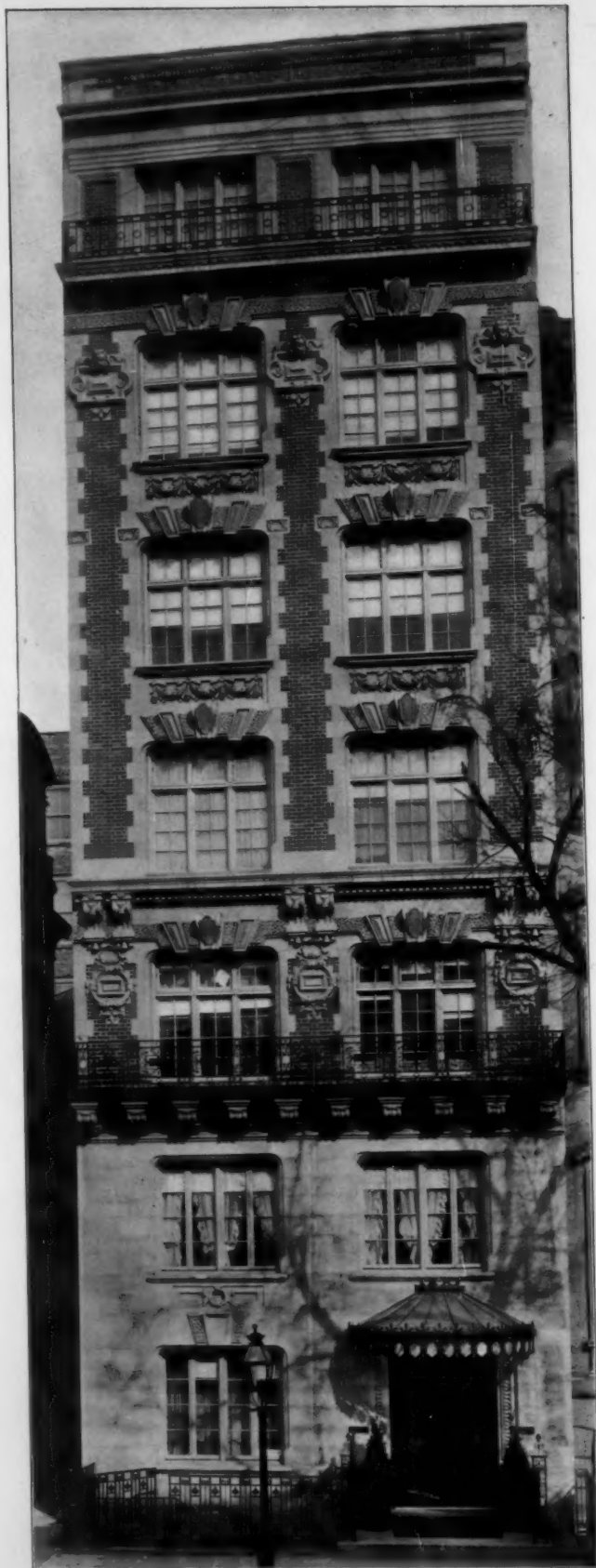
are plans of the well-known "Dorilton," whose remarkable façades are such conspicuous features of upper Broadway.
(To be continued.)

Architectural and Building Practice in Great Britain.

BY OUR SPECIAL REPRESENTATIVE.

IT is an axiom nowadays that nothing public shall be done without discussion, and as each side tries to make the other appear as foolish or as wrong or as villainous as may be, it is extremely difficult for an impartial observer to determine exactly who is right and who is wrong. This is a peculiarly argumentative age, and one in which the small man is vastly conscious of his own ability, his own discretion and, above all, his own common sense, though the less said about that the better. If earlier England witnessed the rise of "the third estate," and later England a fourth, we are surely in the splendor of the fifth, a splendor which sees prosperous butchers metamorphosed into city magnates and the large draper so zealous in his new learning that he may rise from his municipal seat and tell the surveyor or architect how to be about his business. It would be wrong to brand all councilors as being men of that breed, but, on the other hand, it is impossible to forget that such men exist in thousands. It is they who are so largely responsible for all the vandalisms and desecrations that are done in our midst, for their "taste" is of the fresh-as-paint order and they would doubtless like every bit of old architecture in the kingdom cleaned up spick and span and everything else done which "common sense" might approve of. Their influence on architecture is not at first apparent, but you may trace it from those "thin, tottering, foundationless shells of splintered wood and imitated stone, those gloomy rows of formalized minuteness, alike without difference and without fellowship," to the miles of respectable villadom spread around every large town and city.

Thus we find that the London County Council, when the proposal to build a great home for itself at last takes definite shape, can have nowhere else to go for a site than the Adelphi. Site after site was considered by the committee—Christ's Hospital, Millbank Prison, the Foundling Hospital, the Hotel Cecil, the Aquarium—until they finally chose the Adelphi, estimated to cost four and a half million dollars. But two facts need to be stated. First, the Adelphi site embraces the finest work of the Brothers Adam in London—the Terrace facing the Thames, the famous home of the Society of Arts, with its wall paintings by Barry (not commendable to modern eyes but historically interesting), and the many houses with their fine ceilings, chimney-pieces and other relics of great talent; all of which the council talked of demolishing as if it were a collection of warehouses or slums. The councilors could speak of nothing but the cost of the site; its architectural value was not mentioned; and all the while the best site in London was allowed to be lost. I mean the crescent end of the new street now being formed from Holborn to the Strand. In previous letters I have referred to this great thoroughfare, which promises to be the finest in London, and I need only now explain that between the crescent at its lower end and the Strand there will be an "island." At one end of this "island" the new Gaiety Theatre and



BACHELOR APARTMENTS, 7 EAST 32ND STREET, NEW YORK.
Israels & Harder, Architects.

restaurant is rapidly rising (a brick core faced outside with Portland stone enriched by bands of marble); at the other end it was proposed to build an opera house, leaving a splendid site in the center. Here was a chance in a thousand, here the council should have built their hôtel de ville; indeed when the Holborn-Strand competition was held such a building was suggested and most of the designs showed it, but the council, to facilitate the passing of their scheme through Parliament, agreed to reinstate the Gaiety Theatre and two other buildings on the "island," and had represented that though the improvement was estimated to cost £4,500,000 they would get a recoupment of £4,000,000, a recoupment which would have been seriously diminished had the county hall been placed on the site. The chance was lost and it now seems likely that instead of a fine civic building we shall have a collection of shops and offices and hotel



CHRIST CHURCH, LONDON.
Professor Beresford Pite, Architect.

premises, with all their limitations and disadvantages. Having lost the chance, the council could do nothing better than propose to spend nearly a million of money on the Adelphi.

As I mentioned at the beginning of this letter, nothing is done now without discussion; and so far as architectural matters go perhaps the Liverpool Cathedral competition has been the subject of more debate than anything else of late. It will be remembered that after being harried right and left the executive committee consented not to restrict the designs to Gothic; and they subsequently appointed Mr. G. F. Bodley, R. A., and Mr. Norman Shaw, R. A., to act as assessors. These two architects have issued their report, which contains one or two observations of interest; they have also made public

some facts of extreme suggestiveness. The majority of the one hundred and three designs were Gothic (the few Renaissance or classic designs were neither commendable nor remarkable); most of them had plans more or less like mediæval cathedrals, with too many chapels around



INTERIOR, CHRIST CHURCH, LONDON.

the east end of the choir; there were clever drawings of poor conceptions by which one might be tricked; thirty-three of the designs were expressly prepared for the competition, twenty-three consisted mostly of competitive designs submitted for large churches in different parts of the world, and the remainder were a miscellaneous col-



CHRIST CHURCH, LONDON.

lection of photographs, drawings and sketches, many of them just gathered together as they lay handy and tied up in portfolios. The assessors selected the following architects to send in designs for the final competition, each to receive three hundred guineas (the assessors receive five hundred guineas each): Austin & Paley, C. A.

Nicholson, G. Gilbert Scott, Malcolm Stark and W. J. Tapper. In addition they honorably mentioned the following: Sir Thomas Drew, J. Oldrid Scott, A. H. Skipworth, H. C. Corlette, C. A. Nicholson, F. Walley, James H. Cook and Reilly & Peach. Up to the present about

We must now wait for the final competition; the designs are to be sent in by April 30 next.

In London two famous buildings are being swept away, namely, Christ's Hospital (the famous Blue Coat School) and Newgate Prison. As regards the former,



CHRIST'S HOSPITAL, HORSHAM. - Aston Webb and E. Ingress Bell, Architects.
General View of Quadrangle, showing Chapel and School Halls.

£155,000 has been collected by the committee for the cathedral.

It is interesting to note that one competitor submitted a plan suggestive of the Royal Albert Hall, London, the entire area being closely seated; the author remarked that he was unable to prepare a design because he had been ill. Another competitor submitted a large chalk drawing of a figure; a third, two photographs of a brass lectern, and so on. The assessors would not for a moment suggest that a man who could draw the figure could not design a cathedral, but when the two photographs of the

the governors found the school inadequate for their needs and were compelled to move to Horsham in Surrey, where fine new buildings have been erected from designs by Messrs. Aston Webb and E. Ingress Bell. The famous old hospital with its great hall is now half pulled down, and the site is to be covered with business premises. This is much to be regretted, but the governors say they were not rich enough to avoid doing so. The school of course takes its name from the dress worn by the boys (a long blue coat, yellow breeches and stockings, a red leather girdle, a clergyman's band around the neck, and

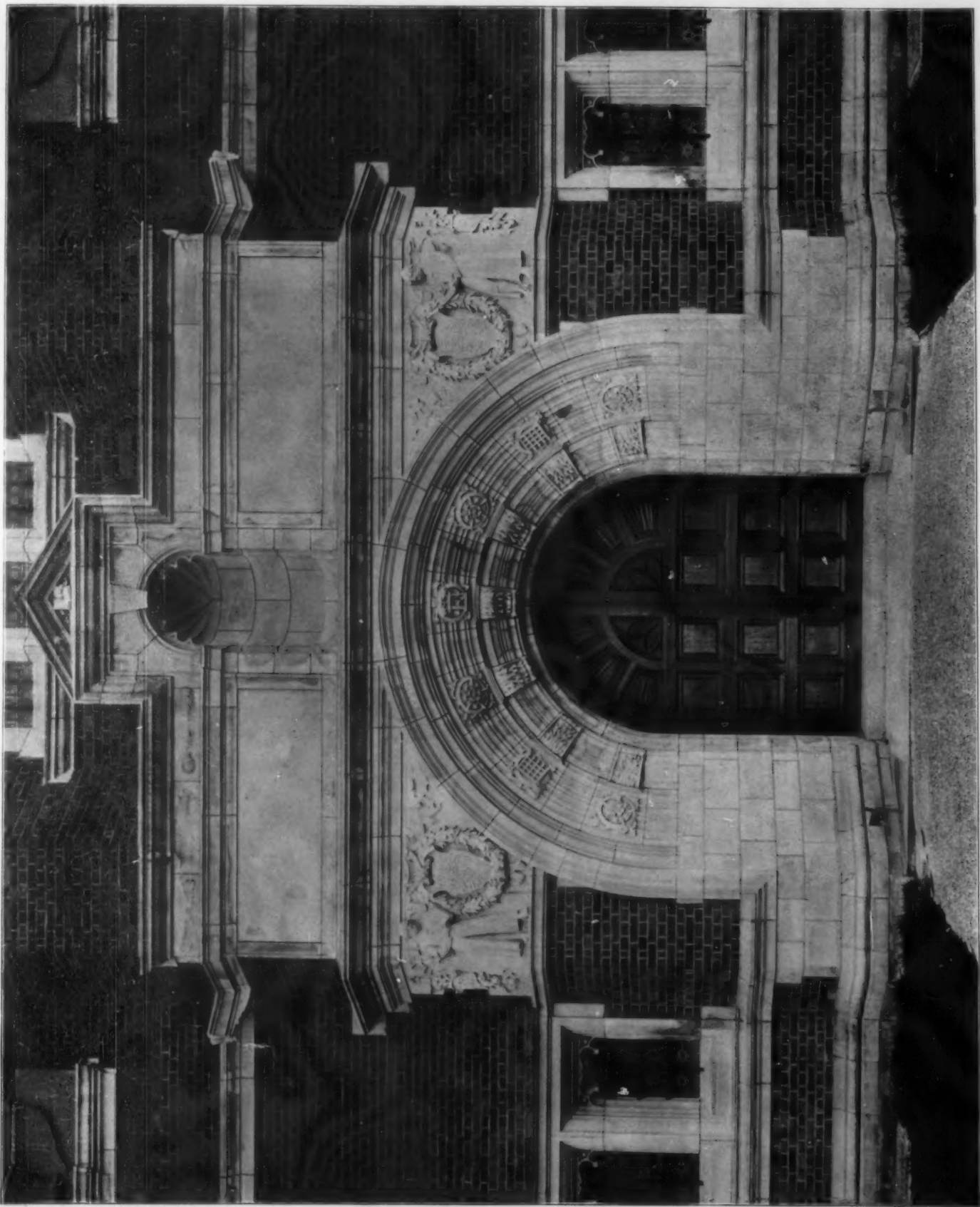


DINING-HALL, CHRIST'S HOSPITAL, HORSHAM.

lectern were placed side by side with thirteen large and carefully matured drawings of a cathedral, showing fine architectural skill and great knowledge in every line, they felt that these threw far more light on the question to be decided.

sometimes a flat black cap about the size of a saucer. Blue was originally confined to servant-men, and not till its recognition as part of the uniform of the British navy was it looked upon as a color to be worn by gentlemen).

Similarly, not many yards away, Newgate, "perhaps



ENTRANCE TO SCHOOL HALL, CHRIST'S HOSPITAL, HORSHAM.

the finest abstract expression of wall surface to be found in western architecture," is in the hands of the house-breakers, though of a different kind from those who were formerly its inmates. Its demolition will be extremely difficult, for Newgate was built as a fortress and the walls are more than 3 feet thick, composed of Portland stone slabs 4 feet and 5 feet long. The outer walls are cased with huge slabs of stone clamped to inner blocks, the cavity between being filled with concrete. But somehow or other, all this massive work must come down and the new Sessions House be erected on the site from designs by Mr. E. W. Mountford. The cyclopean nature of Newgate has preserved it in good condition; there are no delicate moldings and carvings to become coated with soot and eaten away, for that is the chief cause of the decay of London buildings. If the soot, instead of

amendment. Whilst referring to this matter I may mention that next year a great international fire exhibition is to be held at Earl's Court under the auspices of the British Fire Prevention Committee. An eminently influential advisory council has been constituted and the support of all the leading continental representatives has been secured.

The committee recently undertook a test between a slated roof and ceiling and a flat roof covered with vulcanite roofing and ceiling. The test lasted one hour, the temperature reaching 1,700 degrees Fahrenheit, followed by the application of water for three minutes. Each floor measured 100 feet superficial, and four weeks were allowed for construction and drying. The slates were "American green," 20 inches by 10 inches by $\frac{1}{8}$ inch thick, with a $2\frac{1}{2}$ -inch lap, and the ridge covered with blue Stafford-



INTERIOR, DINING-HALL, CHRIST'S HOSPITAL, HORSHAM.

being allowed to settle year after year, were periodically swept away, not scraped, the buildings would last very much longer. Brickwork does not suffer like stone in this respect.

The question of fire protection is receiving increased attention from all city architects, and the terrible fire which occurred last June in Queen Victoria Street, London, has directed special attention to the subject; in fact, the various municipal and government officials have been in communication, with the result that a bill is proposed to be introduced into Parliament next session for the amendment of the London Building Act in regard to fire prevention. At present the act is not retrospective and it is not therefore possible to insist on fire-proof staircases and other requirements in certain old buildings; but this will be altogether changed by the proposed

shire ridging. The laths were of sawn spruce $1\frac{1}{4}$ inches by $\frac{1}{4}$ inch. Gutters lined with No. 14 gauge (Vieille Montagne) zinc. The vulcanite roofing was covered with $2\frac{1}{2}$ inches of gravel and sand. In fifteen minutes the plaster to the ceiling of the slated roof began to fall and in forty-seven minutes the whole of this roof collapsed; while in fifty-four minutes the underside of the vulcanite flat was a sheet of flame, though after sixty minutes the fire had not passed through it, and it was sound enough to be walked upon. Many other matters of interest to architects have taken place recently, but I can only briefly refer to one or two of them.

A proposal has been made to reform the architectural room at the Royal Academy exhibition so as to get rid of "tricky" perspectives and admit photographs, which are

not allowed now on any account; but there is little hope of such reform at present.

The rebuilding of St. Mark's campanile, Venice, has been widely discussed, the general opinion being in favor of a reconstruction, and the Academy opened a fund for that purpose.

An improved process for making stock bricks is being experimented with by Messrs. Eastwood & Co., Ltd., who have laid down a large plant at Sittingbourne. The same material as before is used,—earth mixed with ashes,—but instead of hand molding a machine is used that will turn out 40,000 bricks a day as compared with



PLAN OF GROUND FLOOR
HOUSE AT GUILFORD.

7,000 or 8,000 by hand. The bricks are carried on trucks to a drying chamber 180 feet long, heated up to 200 degrees Fahrenheit by exhaust-steam pipes, the moistened air being drawn off by fans. After twenty-four hours the bricks are hard and practically dry; they are then put into a kiln 180 feet long, where the maximum heat is 900 degrees Fahrenheit. Here they remain for three days. To allow for shrinkage, they are molded $9\frac{7}{8}$ inches by 3 inches by $4\frac{3}{4}$ inches; when dried they measure $9\frac{1}{4}$ inches by $2\frac{7}{8}$ inches by $4\frac{1}{2}$ inches; and after being burnt they come down to the standard size, $8\frac{3}{4}$ inches by $2\frac{3}{4}$ inches by $4\frac{1}{4}$ inches. The plant is a German patent and it is claimed for it that there is no waste and that the process can be carried on during the whole of the year instead of for about six months, as at present.

In conclusion I may refer to the accompanying illustrations. Mr. Belcher has designed a great many houses for the nobility, and the one here illustrated is a good example of his work. The house is built of purple bricks with red quoins, the exterior woodwork being painted white.

Professor Beresford Pite's church in the Brixton Road, London, exhibits quite new methods of treatment. Note the girder under the gallery, which is left exposed (it is painted an ochre color). The woodwork inside the church is stained a dark green, and the roof is very pleasingly lined with alternately light and dark narrow strips of wood diminishing towards the crown.



HOUSE AT GUILFORD.
John Belcher, Architect.

The new schools for the Blue Coat boys at Horsham, by Messrs. Aston Webb, A. R. A., and E. Ingress Bell, are most extensive and comprise many more buildings than those shown by the accompanying illustrations. Mr. Webb is the president this year of the Royal Institute of British Architects and has many important schemes in hand, including the Queen Victoria Memorial and the extension of South Kensington Museum.



NUMBER 5 NEWGATE STREET, LONDON.
C. Stanley Peach, Architect.

The premises in Newgate Street, London, by Mr. C. Stanley Peach, F. R. I. B. A., are very cleverly treated in terra-cotta and brick. There are many refinements in the design, such as the little figures above the first-floor windows.

The Town Hall Series. IV. A TOWN HALL IN MASSACHUSETTS.

BY HENRY FORBES BIGELOW.

IN early New England days we find in the old towns settled by the Puritans an open space in the center of the hamlet around which the houses were grouped and where in many cases the meeting-house and later the municipal buildings faced. It was a very common arrangement to have the floor of the meeting-house raised a story, and the basement used as a town hall and entered often at the side. The New England town meeting originated in a house such as this, which served as a place of assemblage only, as the offices of the town clerk and selectmen were at their homes or places of business, and only the legal notices were tacked beside the door.

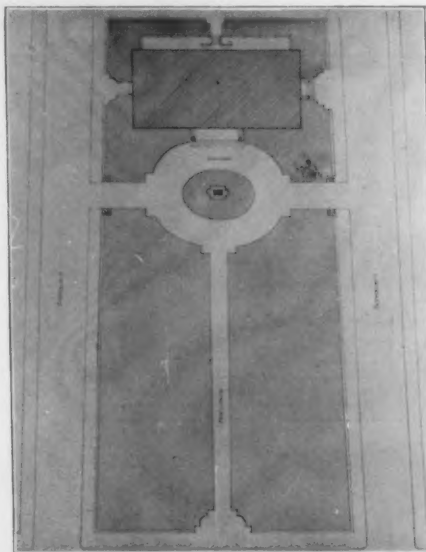
In many places a separate town hall is a luxury only attained in recent years, and one for five thousand inhabitants or over needs first an auditorium capable of accommodating all the legal voters at once, and second, accommodations for the offices of the town clerk, school committee, town treasurer, assessors and other officials, as well as often accommodations for a public library and in some instances the fire department, though this for obvious reasons

voters requires frequent renewal and vent flues of ample area and vigorous draught, and it should have good acoustic properties.

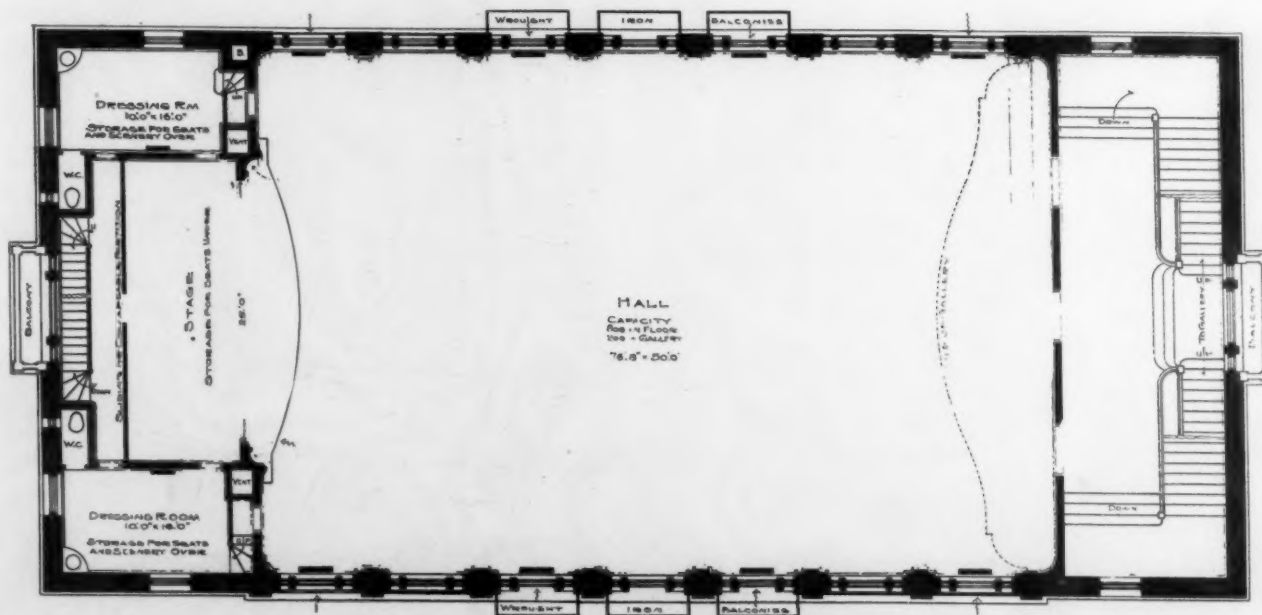
The site chosen for this town hall is on the small common of a village of five thousand to six thousand inhabitants such as one finds in most New England towns. The village churches are found about this common, and the main street runs on one side of it. A simple type of colonial architecture somewhat modified has been chosen as best suiting the traditions of the

place and lending itself easily to the requirements. The exterior is intended to be built of red brick laid Flemish bond, with trimmings of white semi-glazed terra-cotta, and the roof of tile. The interior is simple in treatment, the corridors having floors of Moravian tile in simple pattern and the ceilings of glazed Guastavino tile. This latter construction is to be used in all the rooms of the first floor and basement. If the money permits, it would be desirable to use glazed white brick for all the walls throughout the basement, and particularly desirable in the lock-up room in order that it may be frequently washed with a hose.

The plans and elevations explain the scheme as fully as a longer description, and are intended to be carried out in as nearly



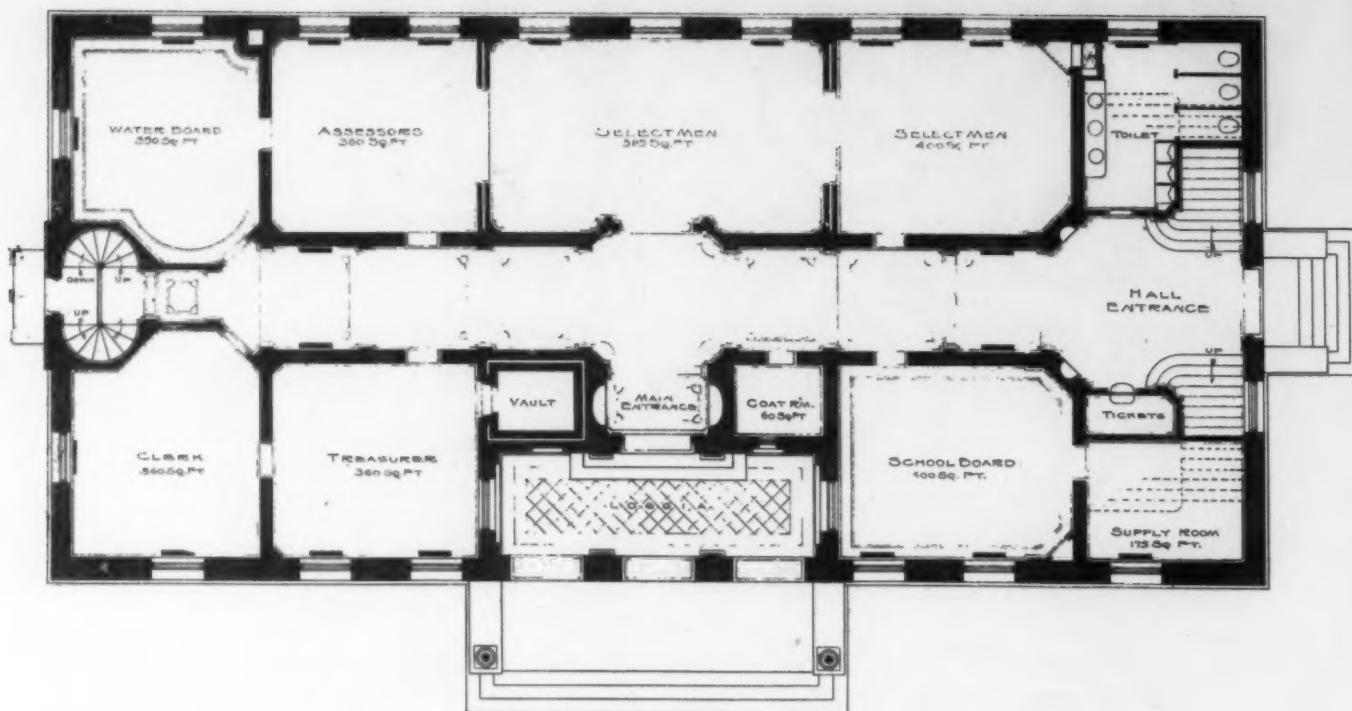
BLOCK PLAN.



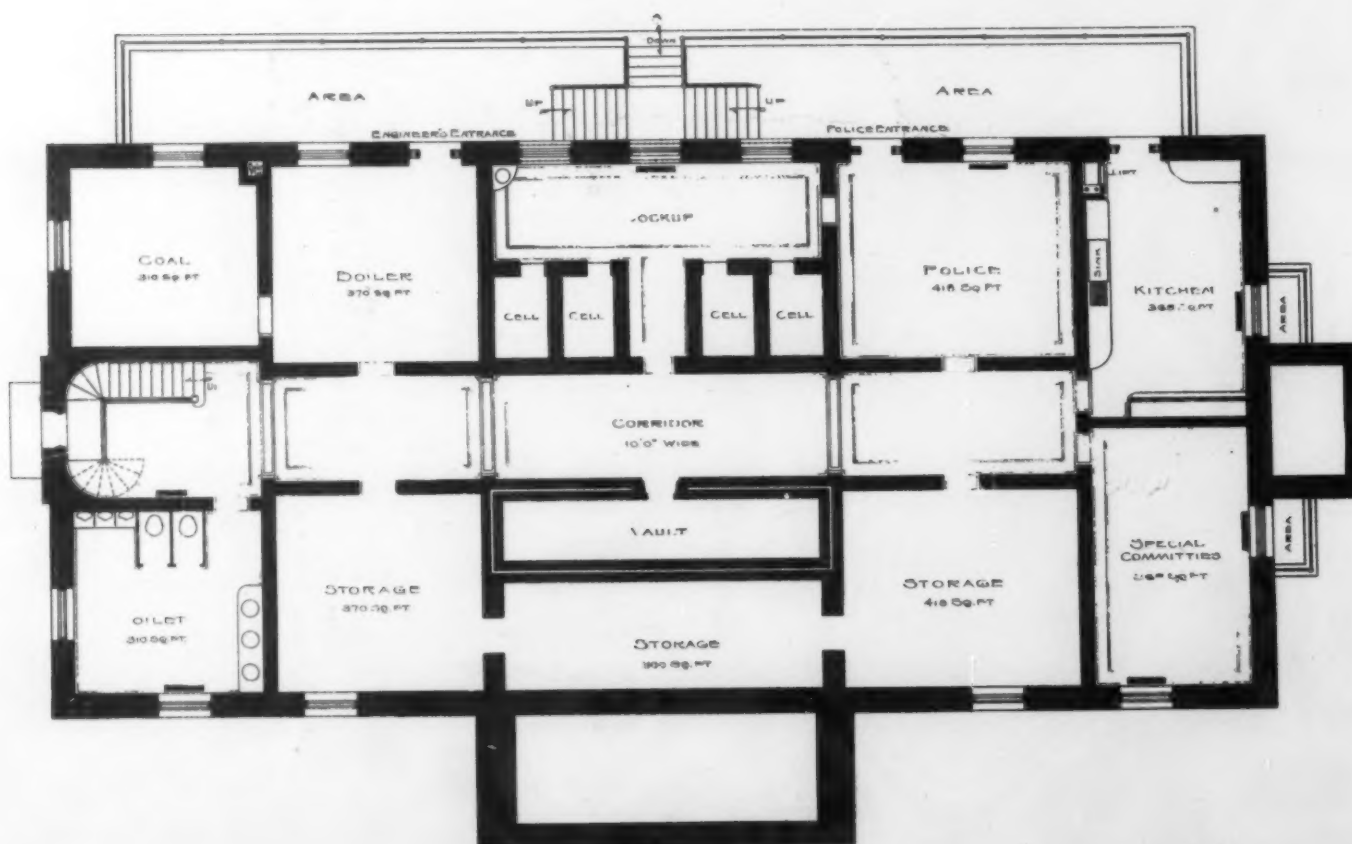
SECOND FLOOR PLAN.

is unusual. The hall should be bright and cheerful, for it is probably the largest hall in the village, and for that reason will be often used for fairs and entertainments. It should be well ventilated, for even in Massachusetts the atmosphere of a thousand closely packed average

fire-proof construction as possible. It may be of interest to add that the drawings proved successful in a competition for a Massachusetts town, and the building is being built on very much the lines indicated.

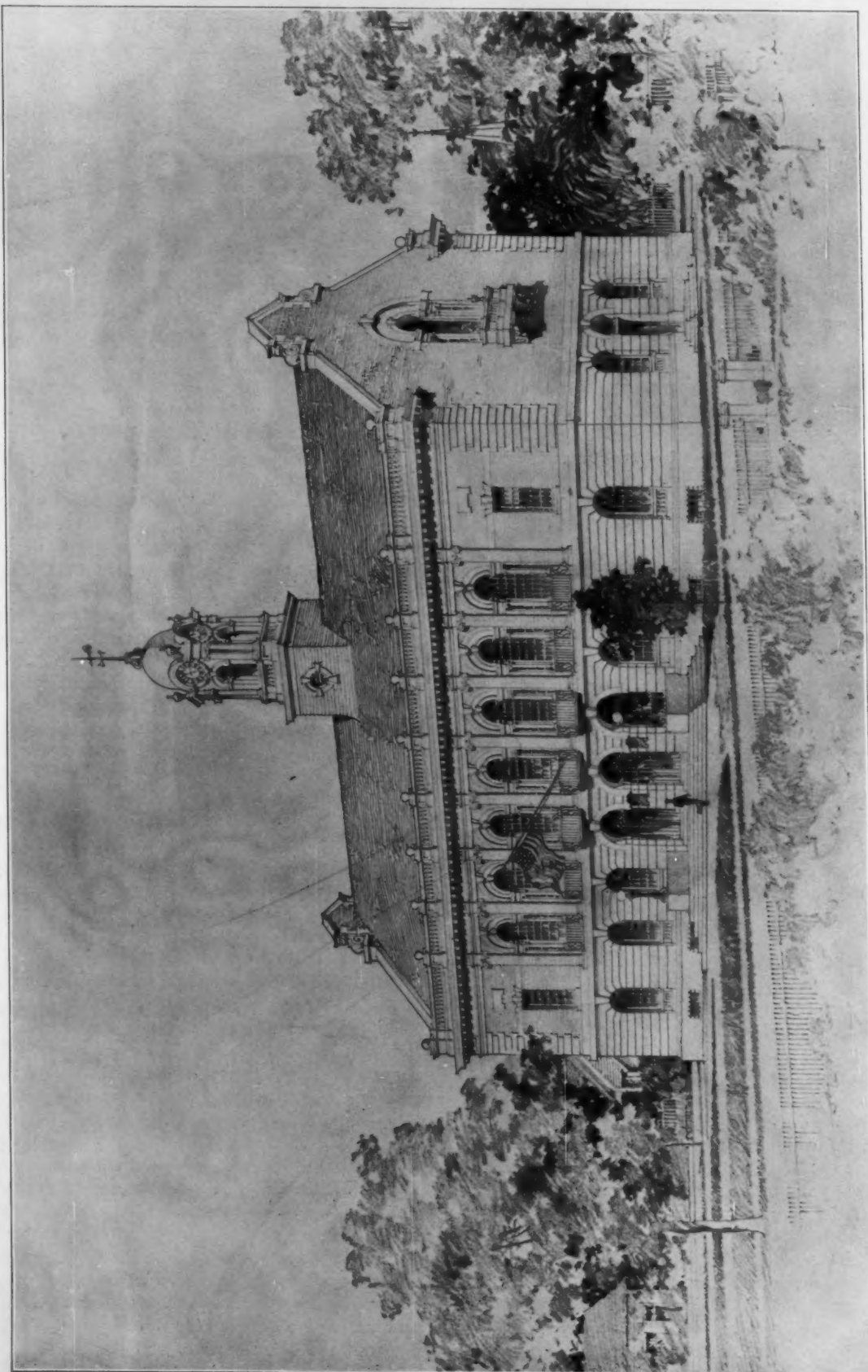


FIRST FLOOR PLAN.



BASEMENT PLAN.

PLANS, A TOWN HALL IN MASSACHUSETTS. Henry Forbes Bigelow, Architect.



DESIGN FOR A TOWN HALL IN MASSACHUSETTS.
Henry Forbes Bigelow, Architect.

Fire-proofing.

The Evil of Composite Construction of Wood and Iron.

IN the construction of buildings in which ironwork is the supporting material the building regulations of cities should prohibit the use of wood for any structural purpose. Iron as a material to resist fire has its limits. At about 400 degrees Fahrenheit it has its maximum strength and for every increase of 100 degrees it loses approximately 10,000 pounds per square inch. Bearing these facts in mind, it is not hard to understand why wood and iron as structural members should not be used in the same building.

A not uncommon method of constructing warehouses, factories and other commercial buildings where the floor spans or loads to be carried by the girders are too great to conveniently permit the use of wood, is to make the columns and girders of iron and the beams and floors of wood, and in this style of construction little if any attention is given to protecting the ironwork from the weakening and injurious effects of heat.

The reasons which usually govern the selection of iron for the framework of such buildings are: First, the rapidity of erection; second, the difficulty of obtaining wood members of sufficient size and strength for girders (which difficulty is becoming greater each year as the forests are denuded of their larger trees); third, structural objections arising from the inability to design sufficiently strong wood connections where great strength is required at the joints, as in the case of high and narrow buildings or buildings subjected to shocks or vibrations which cannot be taken up by the thickness of the masonry walls; fourth, the necessary thickness of walls in the all-masonry type in lower stories necessary to support the masonry walls above.

It may be said that all these reasons may also be applied in favor of the fire-proof building and this is true. The fact is, the skeleton form of building presents many advantages from a standpoint of construction. It is so simple, so direct and can be designed so efficiently that these strong points have all been borrowed from this form of construction, while its vulnerable points have not been protected, consequently we have in such high buildings a type possessing some of the advantages of the skeleton type, but none of the advantages of the fire-proof type, coupled with the greatest vulnerability to possible total destruction by fire.

From an insurance standpoint the all wood, slow burning construction type, particularly if it is supplied with sprinklers, is much better than the composite type. Buildings of the composite type are not likely to have their outside columns protected, except by the outer brick walls, and if the columns are thicker than the walls the inner sides of the columns are usually uncovered or at best covered with a thin layer of tile or metal lath and plaster; and as the building is not treated as a fire-proof structure, the inside iron framework usually has no protection whatever. Should the composite type of building be menaced by fire from the outside or inside, serious damage is likely to result not only to the structure but also to adjoining buildings and to the firemen.



FIG. 1.

One reason, perhaps, that this matter has not received proper consideration from the designers of buildings and the municipal authorities is probably because it is not often that when a fire occurs in such a building a good illustration of it can be secured or that the contributing causes to its destruction can be clearly seen. Usually the "remains" are bent and distorted by falling walls or the causes which led to the damage are so complicated that any conclusions drawn from it are open to question.

Several years ago a fire originated in the Detroit Opera House by the explosion of a calcium light tank. The explosion set fire to the Opera House, and from the Opera House the fire was carried across a small street thirty feet to a ten-story steel-frame building with a composite wood and iron floor system. The fire entered the steel-frame building at several unprotected openings, and was rapidly communicated to all the floors through an open elevator shaft and stairway. The inflammable character of the stock, which was furniture, added additional combustible material to the wood beams and floors.

Figures 1 and 2 show the evil effects of the composite construction, by comparative photographs taken "before and after." They illustrate the argument so clearly and such illustrations are so rare that no other excuse is needed for using them. In this case the primary causes of the destruction came from the outside, and it might be said, attacked the building from its least vulnerable side.

The walls of the mercantile building were 16 inches thick in the first story and 12 inches above this up to and including the tenth story. One of the side walls was built of tile in several of the upper stories. The floors were of plank about 3 inches in thickness and the girders were protected by tile of 1 inch in thickness; the columns were also covered with tile 1 inch in thickness. The wall columns were partly built into and partly protected by the outside walls, and where exposed on the inside were covered with tile 1 inch in thickness. An examination of the illustration taken after the fire will show what very serious damage a fire in such a building can do. The steel frame has seriously suffered from the heat, many of the curtain girders are much twisted and bent, and quite a number of the girders in the interior of the building are also bent and out of line. In this building, also, the brick curtain wall is seen to be missing. The front walls of the building did not suffer so much



FIG. 2.

because they had only to contend with the fire inside and not with an additional fire outside, as did the rear walls. The walls of the building proved to be a menace to the firemen, although no fatalities resulted. The wonder is that the skeleton remained in position at all, and the fact that a considerable part of the framework was used again in the restored building was due probably to the efficient use of water before the point of yielding of the iron had been reached.

Had this building been of the true fire-proof type, as it might have been with a little more expense, and had its openings been properly protected by metal frames and sash with wire-glass lights from adjacent exposure, there is little doubt that it could have successfully passed through the fire with but little injury, but with thin walls and a mere imitation of fire-proof covering in connection with wood beams and floors, hardly as good a showing could have been expected.

Buildings of the composite type should not be encouraged either by the building laws or by the insurance companies, for while some buildings of this type may make a better showing than could be expected in case of fire, owing to the timely arrival of the fire department, yet they present so many objections from the standpoint of safety to the adjoining buildings, the occupants, the public and the fire department, that they should be prohibited by proper laws or at least regulated to such a modest height that in event of failure no great harm can result. It must be borne in mind, however, that such prohibition or regulation will be needed, for after a designer has once become familiar with the sureness and certainty of iron construction, as well as its very many other advantages from a constructional point of view, he will naturally turn to this class of construction when it can satisfactorily solve his difficulties, without thinking of the possible after effects such construction may have upon the neighborhood in event of fire.

In the building illustrated this composite type of construction is carried to the very great height of ten stories, and the folly of the laxity of building laws which permitted this is evident. Providence is said sometimes to

take particular care of the foolish, but it is not safe to count forever on this immunity from harm.

What is said here of composite construction can also be said of the growing and indefensible custom of building party or division walls upon an iron framework—for the proper fire-proofing of the ironwork of such walls is rarely considered, and the difficulties in the way of properly applying the fire-proofing are so many that the convenience of a wall without offsets is usually considered more important than proper thickness of covering for the ironwork.

The use of iron skeleton work or iron girder construction in the street fronts of buildings which have joists of wooden construction is not good practice under ordinary circumstances, for in this class of buildings the fire-proofing is usually omitted and exposure to fire may cause the collapse of the front with possible fatalities to the firemen and destruction to neighboring buildings. Ironwork, if used in combustible buildings, requires even more care to protect it from exposure, perhaps, than if used in non-combustible or fire-proof construction, and in any case requires more covering than is usually applied.

The facility with which alterations can be made to old or existing properties by removing the fronts of the lower stories and replacing the masonry with ironwork, calls for special attention from the building inspectors and insurance companies. As these alterations are usually made in the cheapest manner, no consideration is given to the question of the effects which fire may bring about. With this class of buildings, if a fire occurs in the lower stories, the heat may be sufficient to so weaken the ironwork that the whole front may come tumbling down to the danger of the firemen and the people upon the street.

The use of ironwork in buildings has brought with it so many advantages that its disadvantages, or rather its weaknesses, in the form of lack of fire resistance and liability to rust have sometimes been overlooked, or rather failure has resulted from a neglect to recognize the necessity of properly shielding these weak but readily protected characteristics of a building material possessing so many useful, admirable and almost indispensable qualities, and the additional cost of effectively fire-proofing ironwork is such a small percentage of the total cost that it is in fact shortsighted to neglect it, and it is further the duty of the building departments of the cities and of the inspection departments of the insurance companies to see that the use of ironwork in connection with woodwork without proper protection is prohibited.

When a practice is wrong it should be discontinued, and nothing is to be gained by temporizing. Building laws should recognize the evil of this form of construction and make it impossible.

Selected Miscellany.

NOTES FROM NEW YORK.

THE general condition of real estate and building operations in this city continues to be prosperous. Even though this is usually a dull season with architects, many of them are now at work upon preliminary sketches for buildings which will be started in the spring. The prosperity of any community can be closely gauged by the poverty which is prevalent and by the number of the un-

employed. We do not assume that this state of affairs is peculiar to New York. In fact reports from all parts of the country suggest a similar condition of affairs, so altogether it may be taken for granted that there is no abatement of the prosperity that has blessed this country for the last six years. Some fatalists are predicting hard times for the near future, and base their predictions upon the over-production of the present year. Facts, however, seem to indicate that there is no over-production, and very recently a well-known student of these conditions said to me, "Do you know that if this city were absolutely blockaded against outside communication without warning for



"THE TROCADERO," OMAHA, NEB. Walker & Kimball, Architects.
Terra-Cotta made by Northwestern Terra-Cotta Company.

employed. The movement is of course in adverse directions,—when the one goes up the other goes down. The smaller the poverty the greater the prosperity, and *vice versa*. By poverty or prosperity is not meant the standing in wealth of a community as a whole, but the actual poverty and prosperity that exist in it and are the factors by which a general conclusion is drawn.

Statistics show that those who are idle this winter are idle from preference, as there is work enough for every

a week there would be a universal famine imminent?" Although it does not seem possible that the immense carloads and boatloads of provisions entering this city are quickly consumed, it is a fact, and comparatively little is stored up. The same conditions seem to prevail in the building world. New apartments and office buildings seem to spring up in a night and are filled up as soon as completed, and strange to say the population of the old buildings seems to remain the same.



DETAILS BY JOHN H. DUNCAN, ARCHITECT.
New York Architectural Terra-Cotta Company, Makers.

Of course there are no men more benefited by prosperous times than those workmen and mechanics who are employed directly or indirectly upon building operations, and if they desire a continuance of prosperity a word of warning is in order. We believe heartily in the organization of labor for the betterment of their condition, and we also believe that their pay should be better when times are prosperous and that they with their employer should reap some additional harvest, but we also believe that the arrogance and unreasonableness which seem to be fast becoming popular among labor unions will do more than anything else to put a sudden stop to prosperity and to cause building operations to cease for an indefinite period. If this comes to pass it will throw into idleness a vast army of workmen, not only of those actually engaged in building operations but in manufactures dependent on them. I know of one large estate, with large property and real estate interests, who



THE BABIES' HOSPITAL OF THE CITY OF NEW YORK, LEXINGTON AVENUE AND 50TH STREET.
York & Sawyer, Architects.
(SEE PLATE NO. 1 FOR FLOOR PLANS.)

sympathize blindly with the workingman, which is only natural, but it would be well if they knew more of the facts. Probably every architect and builder in the country could relate anecdotes corroborating these statements, and they would prove intensely interesting.

The enormous and popular Waldorf-Astoria is soon to have a rival in a mammoth new hotel to be erected on the site of the old Hotel Brunswick. This has been rumored at many times, but this time it seems to be a fact. Mr. Charles T. Barney is at the head of a syndicate which will build and run the hotel. It is estimated that \$4,750,000 will be spent on the building.

CONCRETE MILE POSTS.

CONCRETE mile posts have been adopted by the Chicago & Eastern Illinois Railroad. These posts are 8 inches by 8 inches, 8 feet long, with 4 feet 6 inches showing above ground. The posts are cast in a mold, and in the form are laid raised characters used to designate the miles and the divisions.



MEDALLIONS DESIGNED BY VICTOR HUGO KOEHLER. New Jersey Terra-Cotta Company, Makers.

have stopped all building operations until the time comes when they can build without the constant annoyances to which they have been recently subjected. Most people

nate the miles and the divisions. The first layer of concrete put in is blackened by coloring matter, and in the finished post the numbers appear recessed in white or

light gray on a black ground. These posts are manufactured at a cost of eighty-two cents each.

THE JOHN STEWARDSON MEMORIAL
SCHOLARSHIP IN ARCHITECTURE.
SEVENTH COMPETITION. 1903.

The managing committee of the John Stewardson Memorial Scholarship in Architecture announces by authority of the trustees of the University of Pennsylvania, who act as trustees of the memorial fund, a competition for a scholarship of the value of one thousand dollars, the holder of which is to spend one year in travel and in the



DAYTON BUILDING, MINNEAPOLIS, MINN.
C. S. Sedgwick, Architect.
Built of Columbus Brick and Terra-Cotta Company's Brick.

study of architecture in Europe under the direction of the committee.

Candidates must be under thirty years of age and must have studied or practiced architecture in the state of Pennsylvania for the period of at least one year immediately preceding the twenty-third day of May, 1903.

Inquiries may be addressed to Professor Warren P. Laird, School of Architecture, University of Pennsylvania, Philadelphia.



HOUSE AT ATLANTA, GA.
Roofed with American S Tile.



DETAIL BY J. M. McCOLLUM, ARCHITECT.
Conkling-Armstrong Terra-Cotta Company, Makers.

SEVENTEENTH ANNUAL CONVENTION OF
N. B. M. A.

THE seventeenth annual convention of the National Brick Manufacturers' Association will be held in Boston February 4, 5 and 6, headquarters at the Hotel Brunswick, corner of Boylston and Clarendon streets. The indications are that a large number of manufactur-



ENTRANCE, CARLETON BUILDING, ST. LOUIS, MO.
Theo. C. Link, Architect.
Terra-Cotta executed by Winkle Terra-Cotta Company.

ers from different parts of the country will be in attendance, and a programme of unusual interest has been arranged for. The banquet of the association will be held at the Hotel Brunswick at 6.30 o'clock Wednesday evening, February 4.



SADDLE AND CYCLE CLUB HOUSE, CHICAGO, ILL.
Jarvis Hunt, Architect.
Roofed with Ludowici Tile.

THE OLD BRICKWORK OF HOLLAND AND BELGIUM.

IN an extra edition to THE BRICKBUILDER for this month there are illustrated fifty selected examples of the charming old brickwork of the Dutch countries. This special number will be ready for mailing about February 1.

THE AMERICAN SCHOOL OF CORRESPONDENCE.

WE have received the catalogue of the American School of Correspondence at the Armour

regular university education and yet who have the ambition to study and improve their condition. The affiliation of the Correspondence School with the Armour Institute is greatly to the credit of both institutions and is in a sense a guarantee of the high standard which the American School has set before itself and to which it has tried so hard to raise the average of its pupils.

During the year 1902, as compared with the year 1901, the amount of building shows a loss in New York, Philadelphia



PANEL, EXECUTED IN RED, GREEN, BLUE, GRAY AND GOLD GLAZES
BY PERTH AMBOY TERRA-COTTA COMPANY.
Alfred Hopkins, Architect.

and St. Louis of from 3 to 18 per cent. San Francisco shows a gain of 92 per cent, and Chicago, Buffalo, Cincinnati



DETAIL BY LORD & HEWLETT, ARCHITECTS.
Atlantic Terra-Cotta Company, Makers.

Institute of Technology at Chicago, also the instruction paper on Perspective Drawing of the same, prepared by Professor W. H. Lawrence, Associate Professor, Department of Architecture of Massachusetts Institute of Technology. The subject-matter is very thoroughly treated in all its aspects and the illustrations are clear and concise, affording great aid to the student. The Correspondence School is doing a good work for the thousands of young men all over the country who are denied the privileges of

and Washington show gains of from 20 to 36 per cent.

IN GENERAL.

Louis Mullgardt, architect, St. Louis, has been commissioned to design the woodwork and mural decorations for the new mammoth hotel which is to be erected at Manchester, England, by the Midland Railway



STATUE (10 FEET HIGH).
Excelsior Terra-Cotta Company, Makers.



STORE FRONT, PHILADELPHIA, PA.
C. L. Gardner, Architect.
Built of "Ironclay" Brick. O. W. Ketcham, Philadelphia Agent.



HOUSE AT CRESCENTVILLE, OHIO.

Jacob J. Rueckert, Architect.

Brick furnished by Ohio Mining and Manufacturing Company.

Company at a cost of \$5,000,000. Mr. Mullgardt, accompanied by his family, sailed for England December 31.

E. O. Kuenzli, for a number of years head draughtsman with Charlton, Gilbert & Demar, architects, Milwaukee, Wis., has been admitted to the firm, succeeding Mr. Demar.

Knight Brothers have opened an office at Crown Point, Ind., for the practice of architecture and engineering, and would be glad to receive manufacturers' catalogues and samples.



DETAIL BY FISHER & LAWRIE, ARCHITECTS.
St. Louis Terra-Cotta Company, Makers.

W. W. de Veaux, formerly of New York City, has opened an office for the practice of architecture at 104 Union Street, Seattle, Wash., and would be glad to receive manufacturers' catalogues and samples.

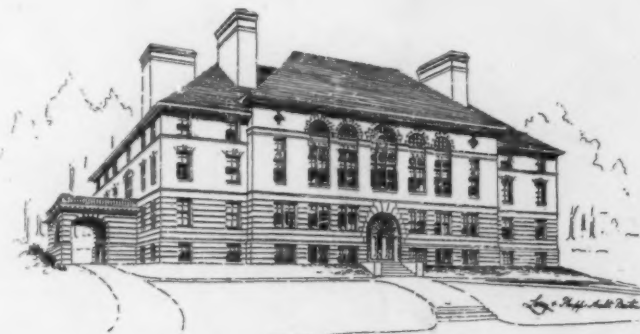
Brick, one of the leading clay-working journals of the country, gives five pages of its January number to a description, with illustrations, of the plant of the Blue Ridge Enamelled Brick Company, located at Saylorsburg, Pa. This is one of the best equipped enameled brick making plants in this country, we may say in the world, it being modern and in every respect up to date. The compliment which *Brick* pays this company is certainly deserved.

As previously announced in *THE BRICKBUILDER* for November, the business heretofore conducted by The Columbus

Face Brick Company will be continued in a more extensive way by The Ironclay Brick Company, a new corporation having a capital of three hundred thousand dollars, with facilities for the annual production of upwards of twelve millions of the "Ironclay" brick in all sizes and shapes. New and larger kilns have been built. New presses of greater capacity are now in operation. Larger storage sheds have been provided, and everything that experience has shown to be necessary or desirable has been done to bring the enlarged and perfected plant fully up to the requirements of the trade. There will be no change in the personnel of the company, David C. Meehan continuing as president and treasurer, and John M. Adams, secretary.

The Winkle Terra-Cotta Company, St. Louis, has issued a very attractive calendar for the new year.

The Pope Cement and Brick Company, Pittsburg, Pa., are sending to their friends a vest-pocket diary which should prove to be very acceptable.



NEW HIGH SCHOOL BUILDING, HYDE PARK, MASS.

Loring & Phipps, Architects.

The new high school building at Hyde Park, Mass., Loring & Phipps, architects, will have the Folsom Snow Guard on its roof. This same statement might in truth be applied to most of the new schoolhouses in New England having pitched roofs.

PERSPECTIVE DRAWING

TAUGHT BY CORRESPONDENCE.



Main Building, Armour Inst.

The American School of Correspondence offers thorough instruction in MECHANICAL DRAWING, DESCRIPTIVE GEOMETRY, ISOMETRIC AND PERSPECTIVE DRAWING AND SHEET-METAL WORK. Courses prepared by professors of the foremost architectural school.

Instruction is also offered in Architecture, Mechanical, Electrical, Locomotive and Marine Engineering, Heating, Ventilation and Plumbing, Textile Manufacturing, Telephony and Telegraphy.

Instruction Under Members of the Faculty of Armour Institute of Technology.

As the instruction is according to the standards and methods of the Armour Institute of Technology, all work satisfactorily passed will receive credit toward entrance work should the student enter the regular classes of the Armour Institute.

Catalogue describing courses, methods and terms on request.

AMERICAN SCHOOL OF CORRESPONDENCE

AT ARMOUR INSTITUTE OF TECHNOLOGY - - CHICAGO, ILL.

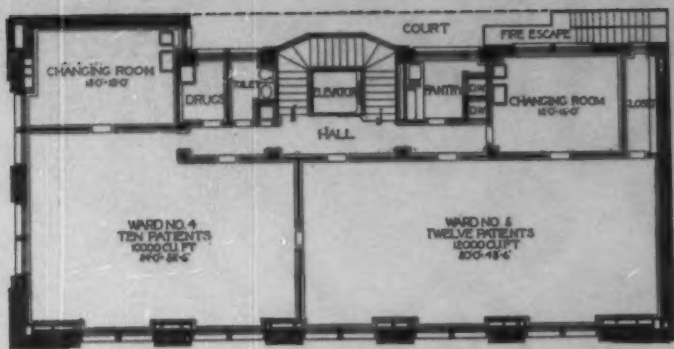


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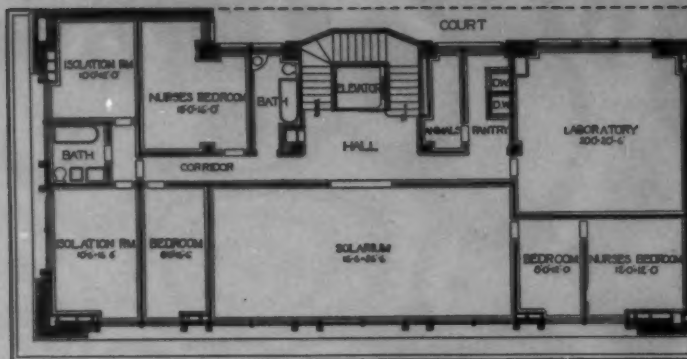
THE BRICKBUILDER.

VOL. 12. NO. 1.

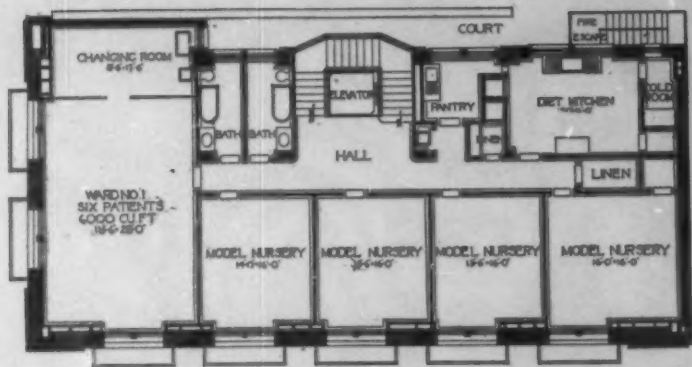
PLATE 1.



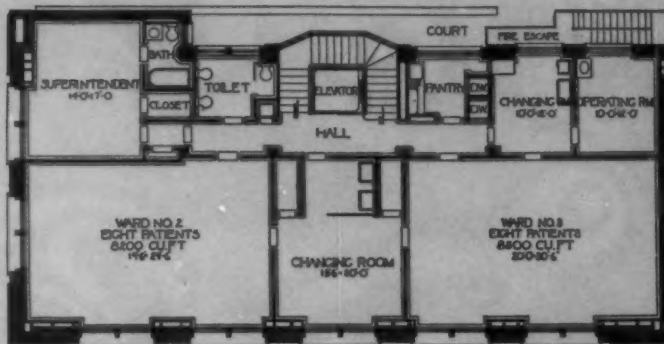
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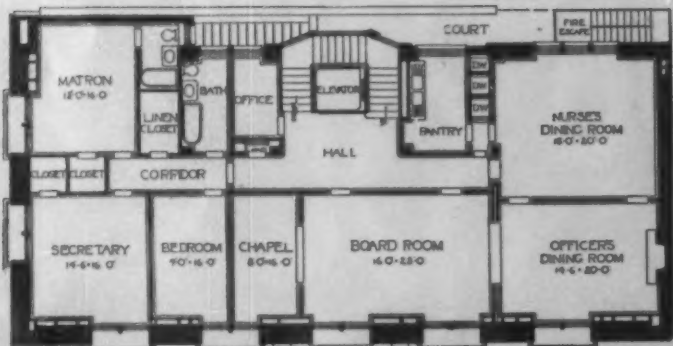
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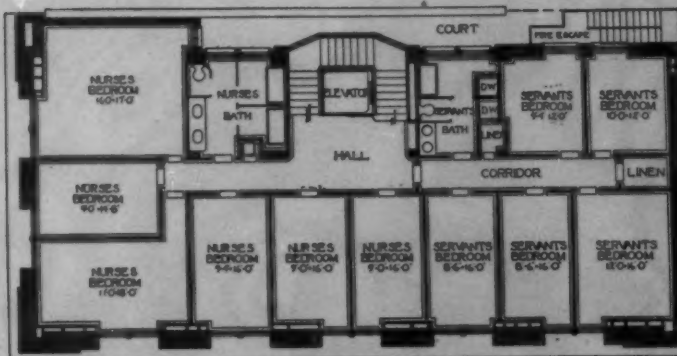
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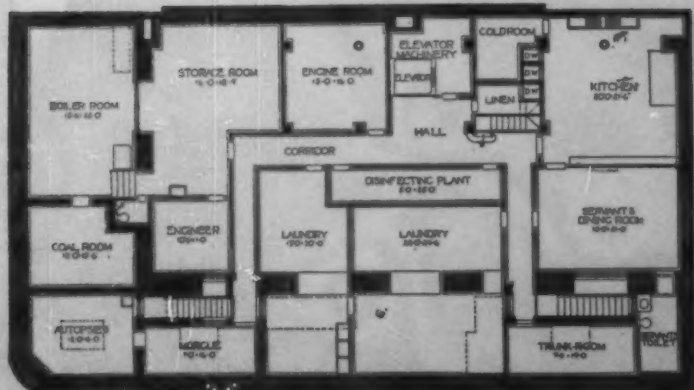
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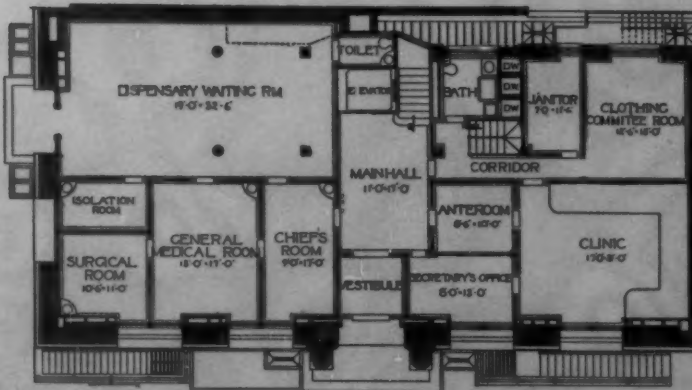
SECOND FLOOR.



THIRD FLOOR.



BASEMENT.

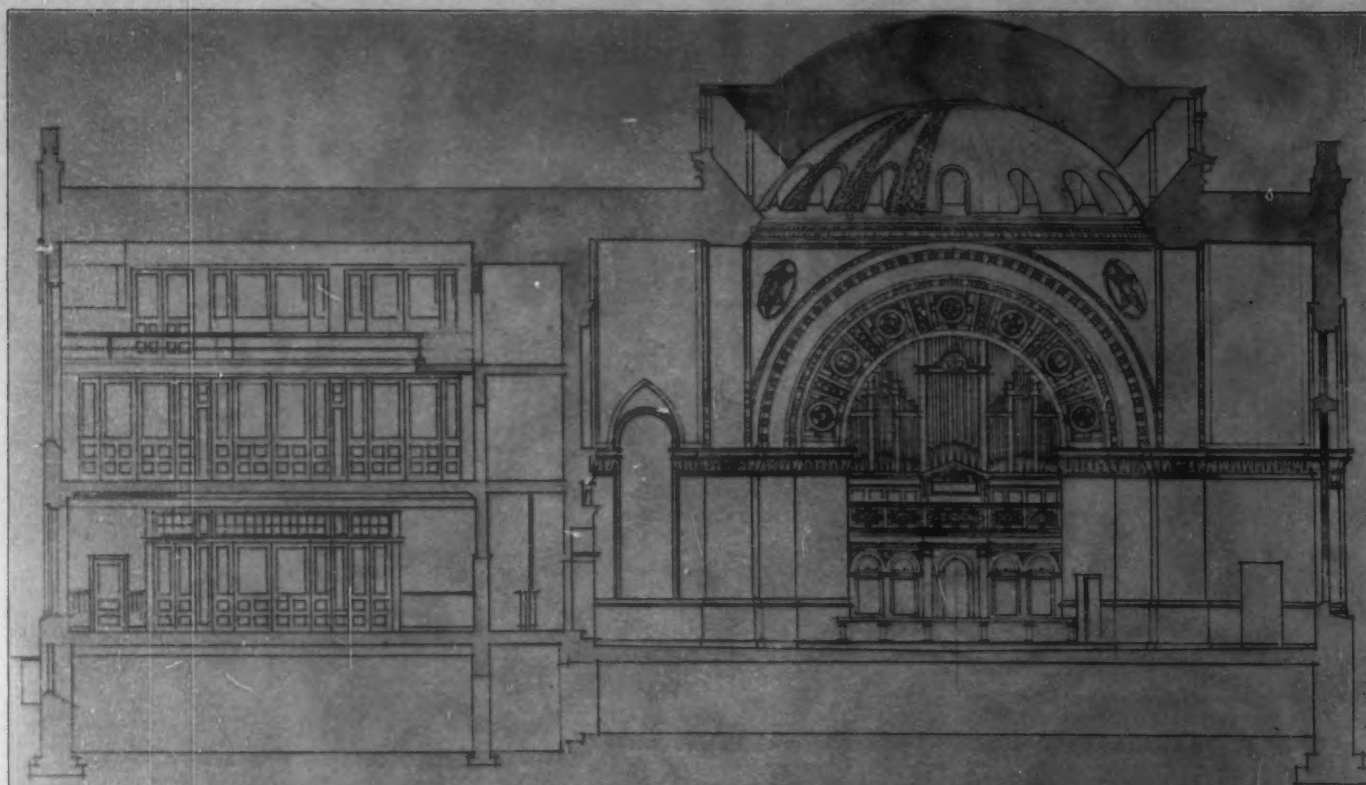


FIRST FLOOR.

(BUILDING ILLUSTRATED ON PAGE 10.)

FLOOR PLANS, THE BABIES' HOSPITAL OF THE CITY OF NEW YORK,
LEXINGTON AVENUE AND 50TH STREET.

YORK & SAWYER, ARCHITECTS.



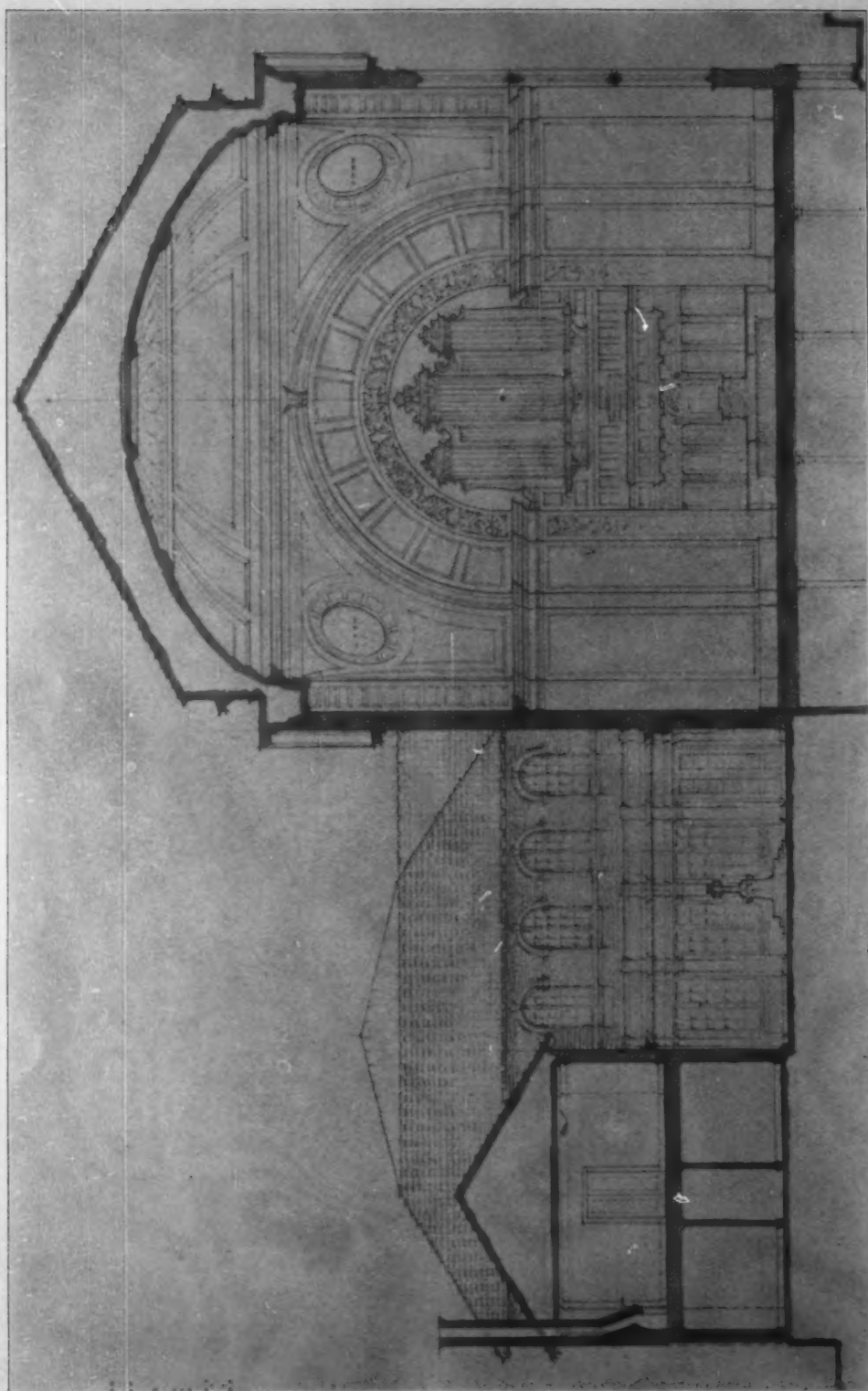
TRANSVERSE SECTION



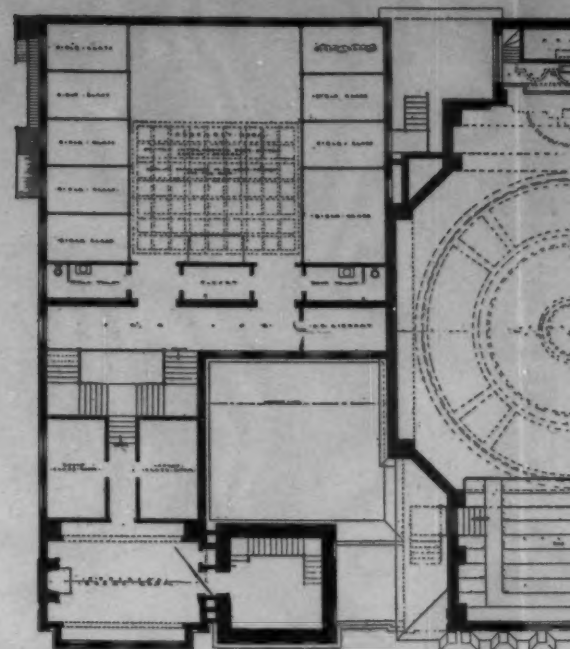
SIDE ELEVATIONS.

COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH WASHINGTON, D. C.

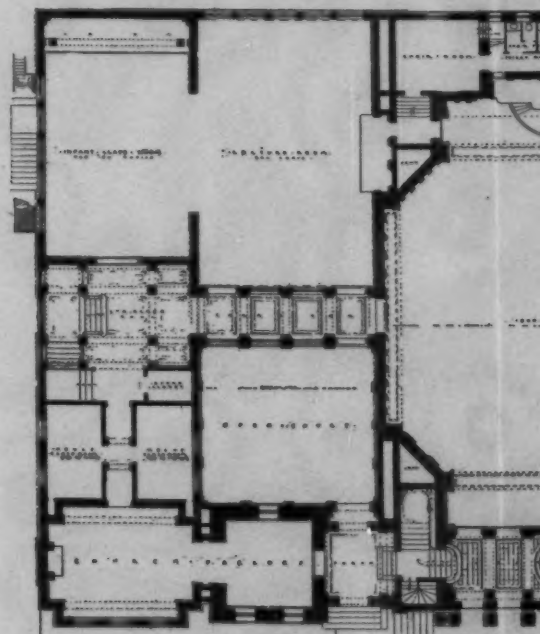
EDGAR V. SEELER, ARCHITECT.



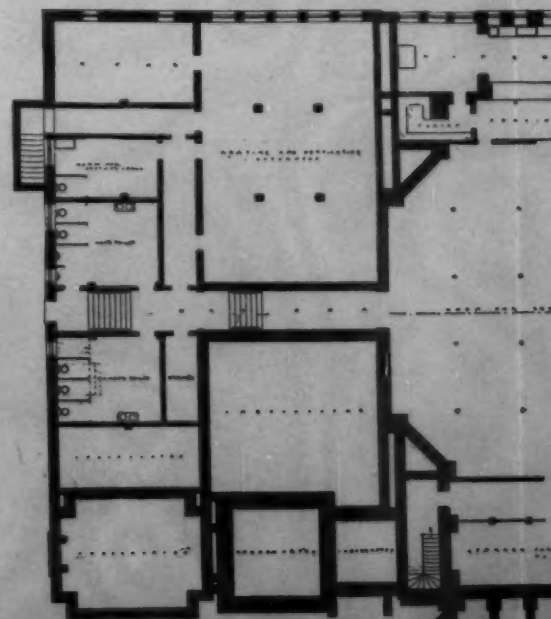
TRANSVERSE SECTION.



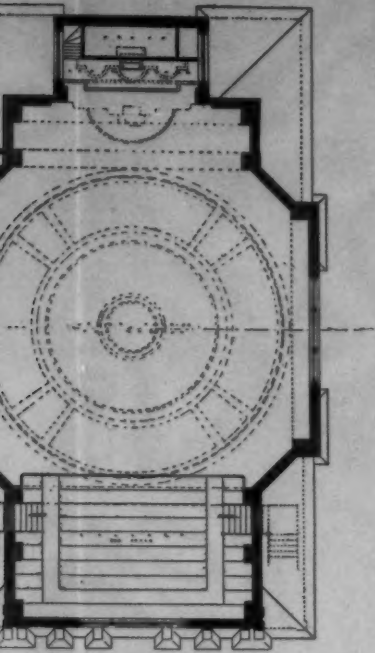
SECOND FLOOR PLAN.



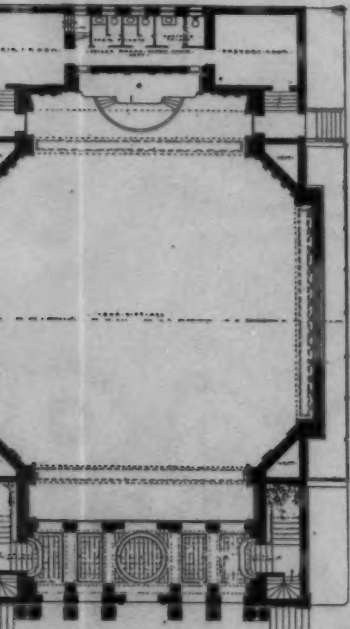
FIRST FLOOR PLAN.



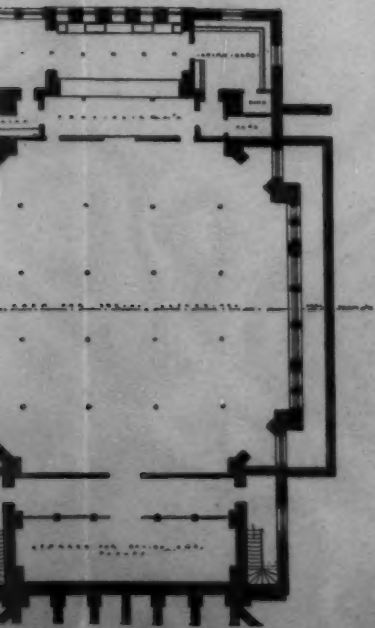
BASEMENT PLAN.



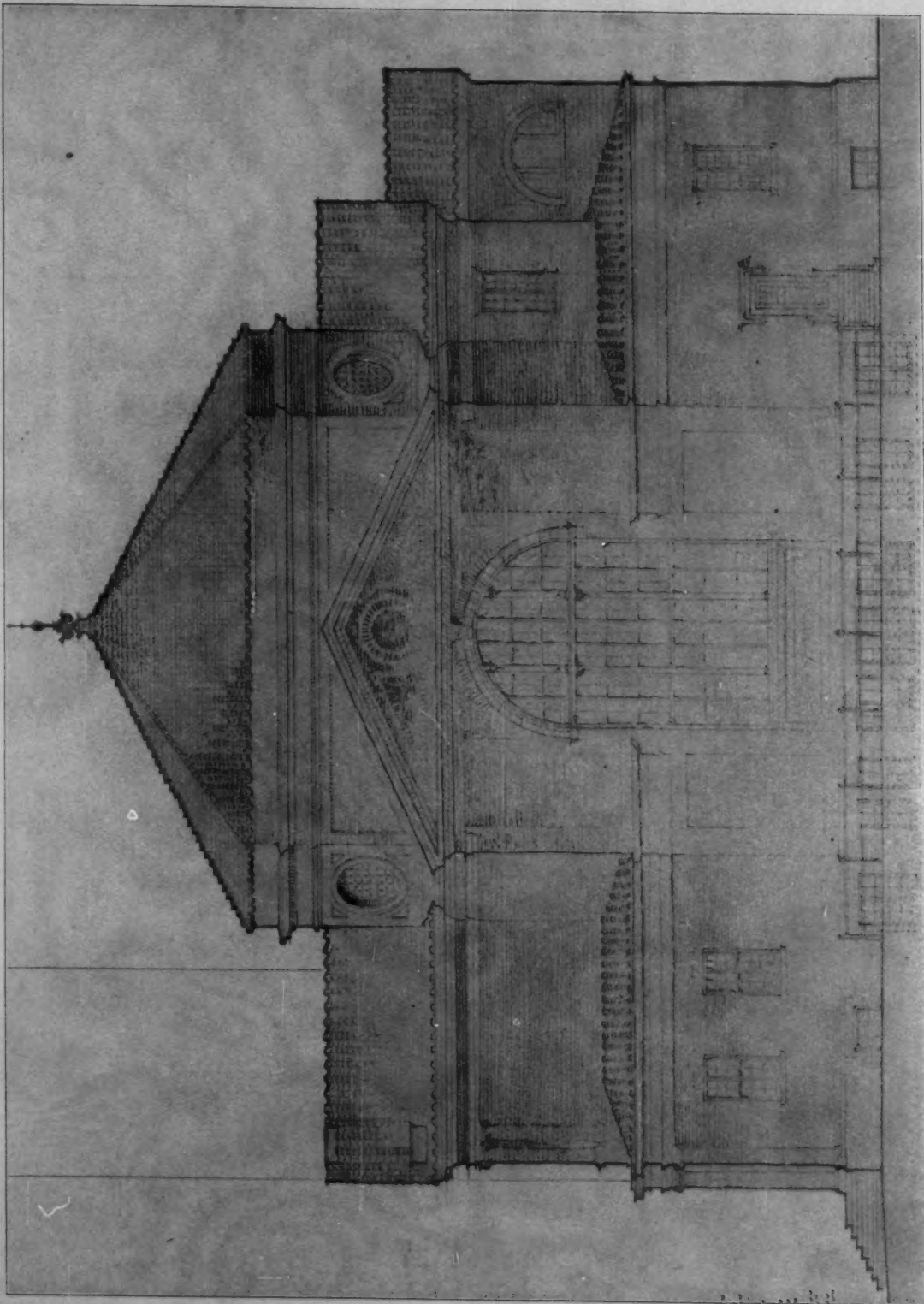
PLAN.



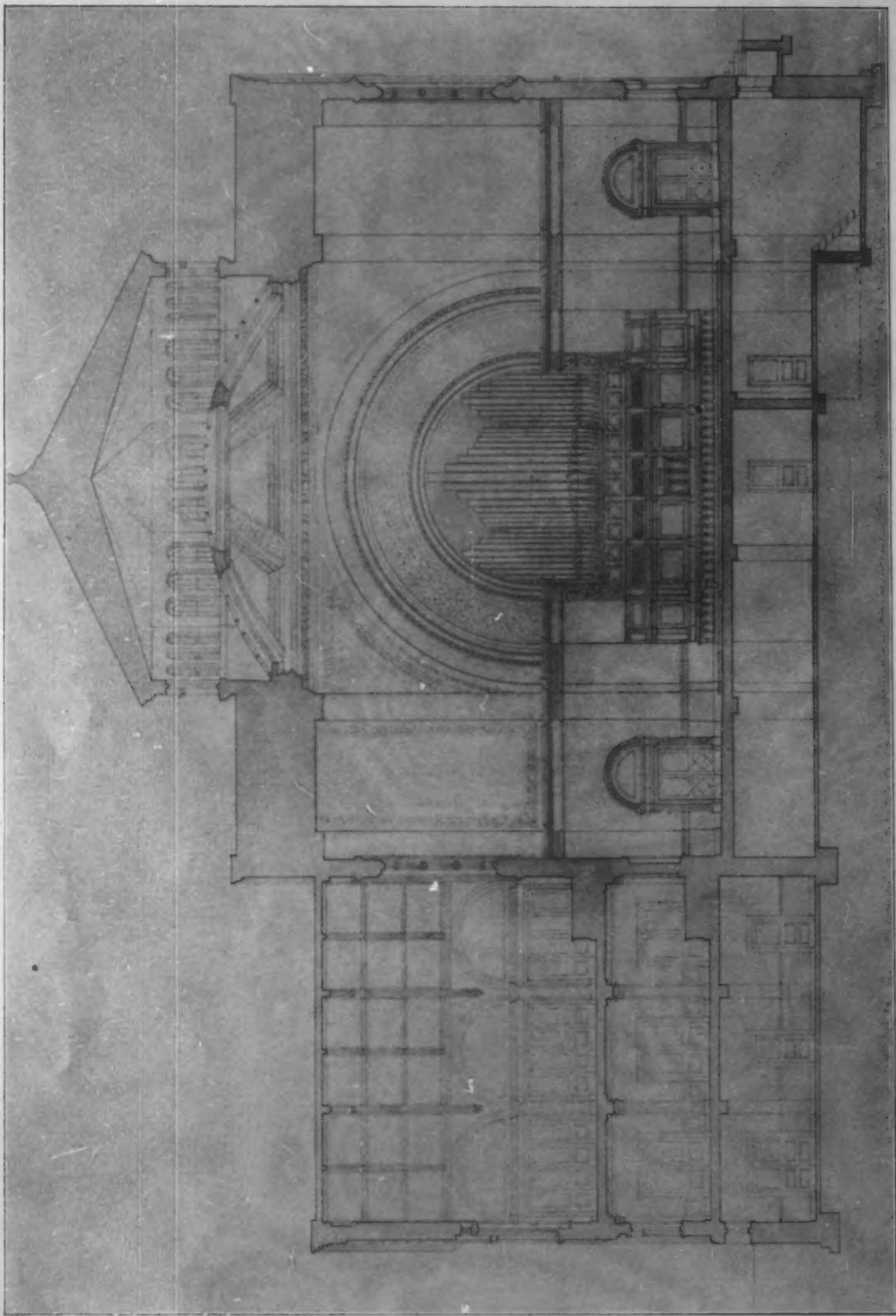
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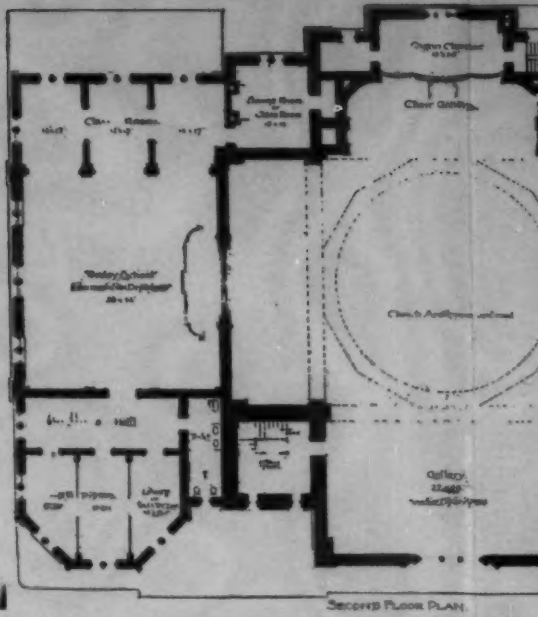
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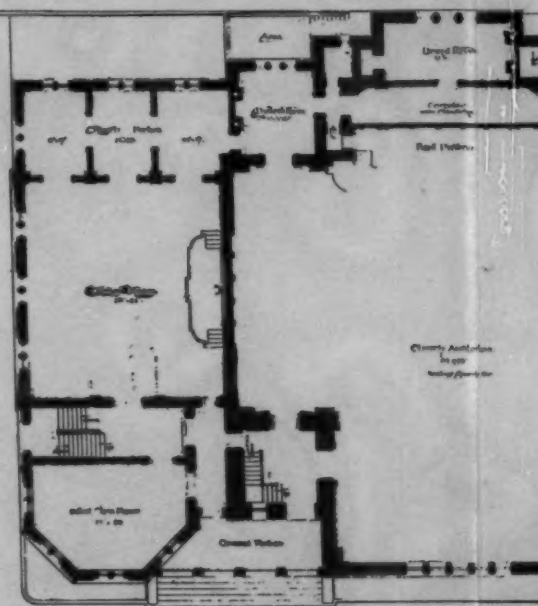
SIDE ELEVATION.
COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
WARREN, SMITH & BISCOE, ARCHITECTS.



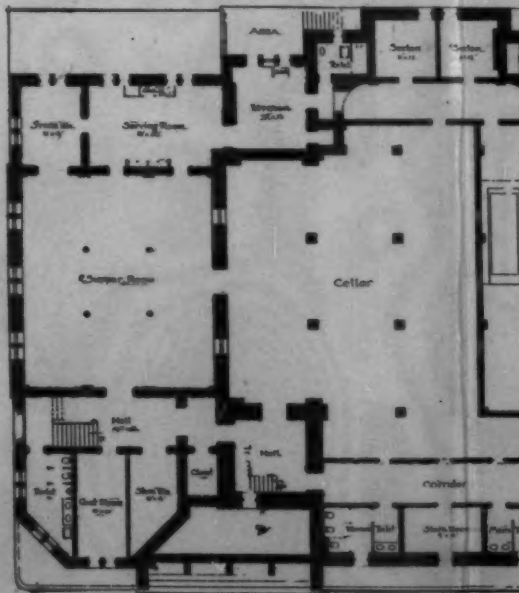
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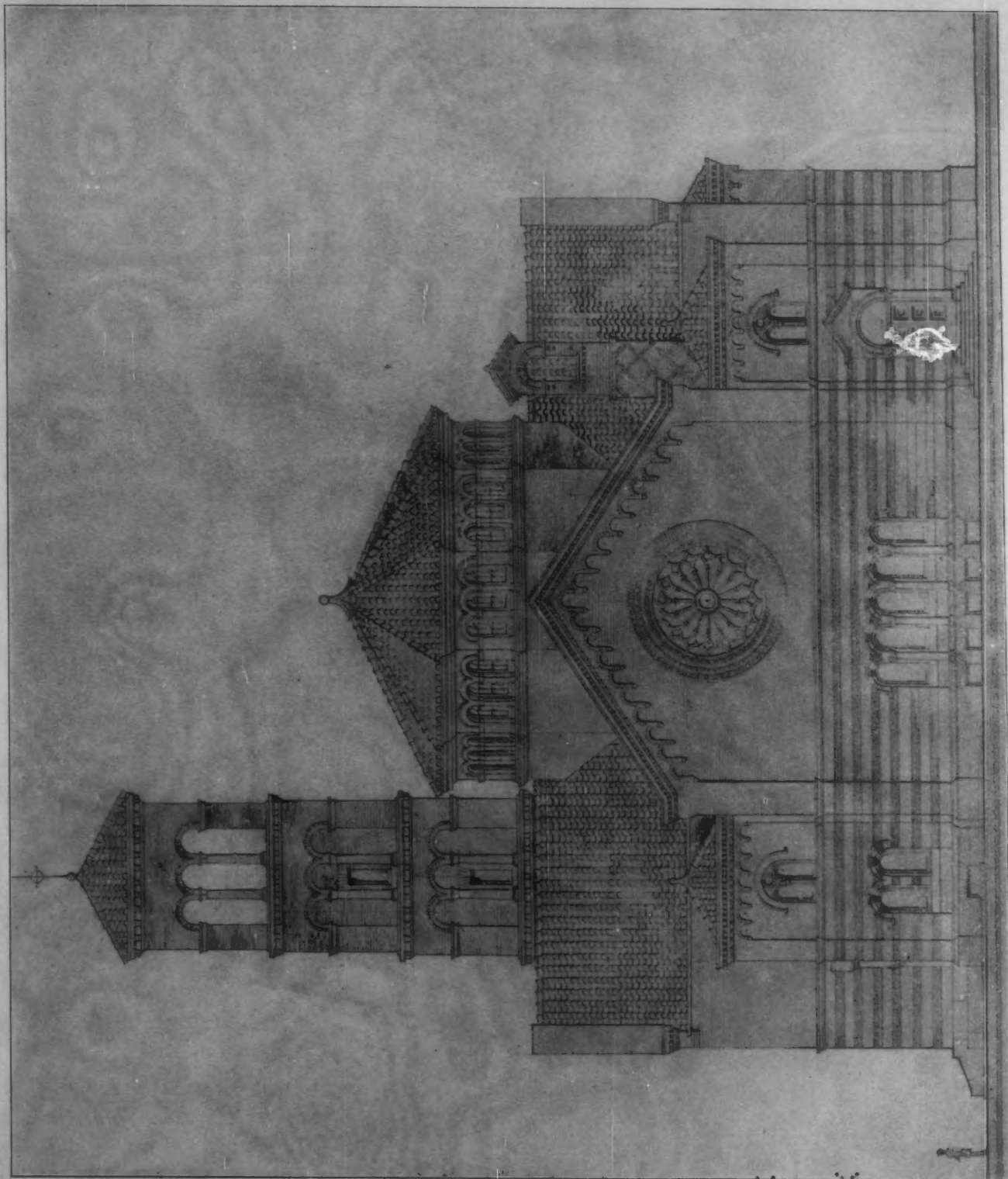
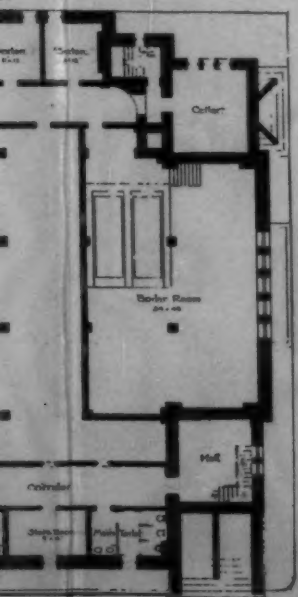
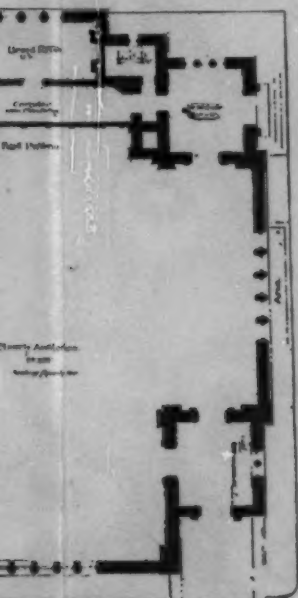
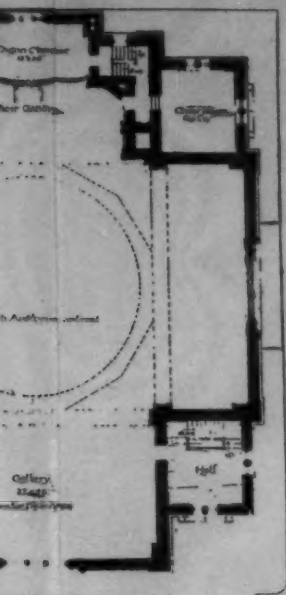
SECOND FLOOR PLAN.



FIRST FLOOR PLAN.



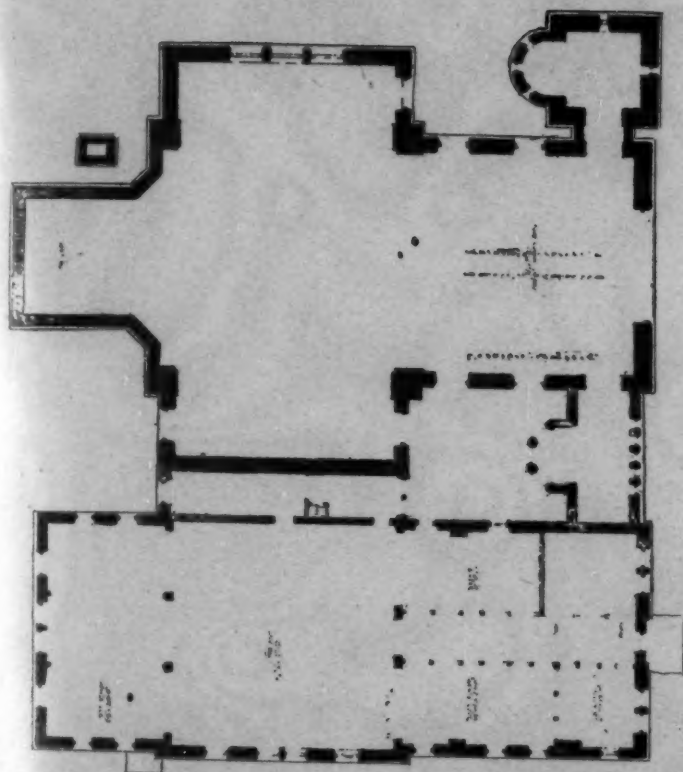
BASMENT PLAN.



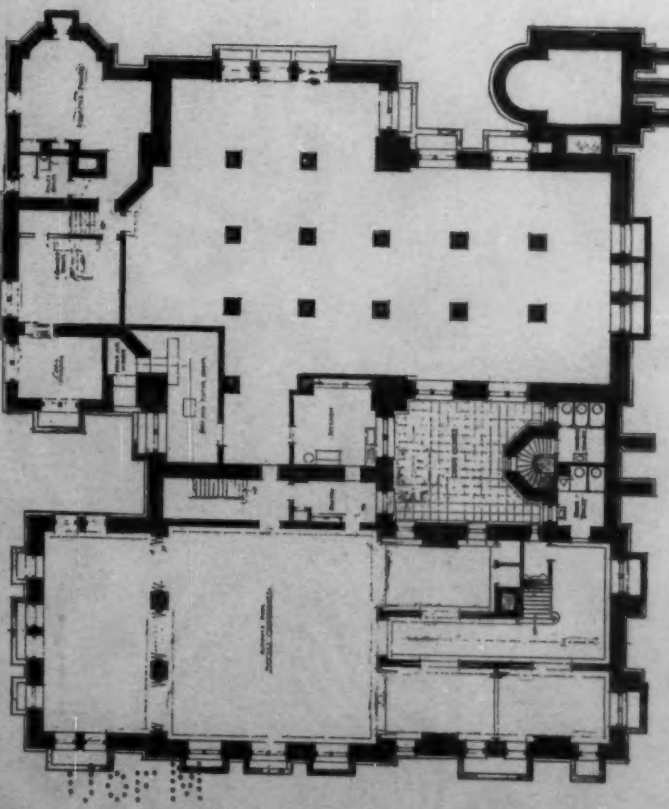
SIDE ELEVATION.
COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
RANKIN & KELLOGG, ARCHITECTS.

U of M

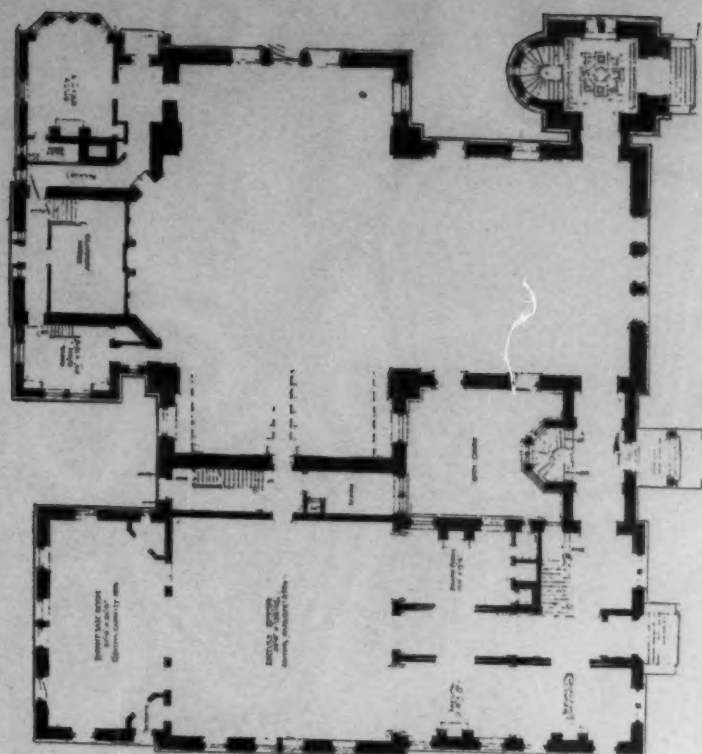
M70U



SECOND FLOOR PLAN.



BASEMENT PLAN.

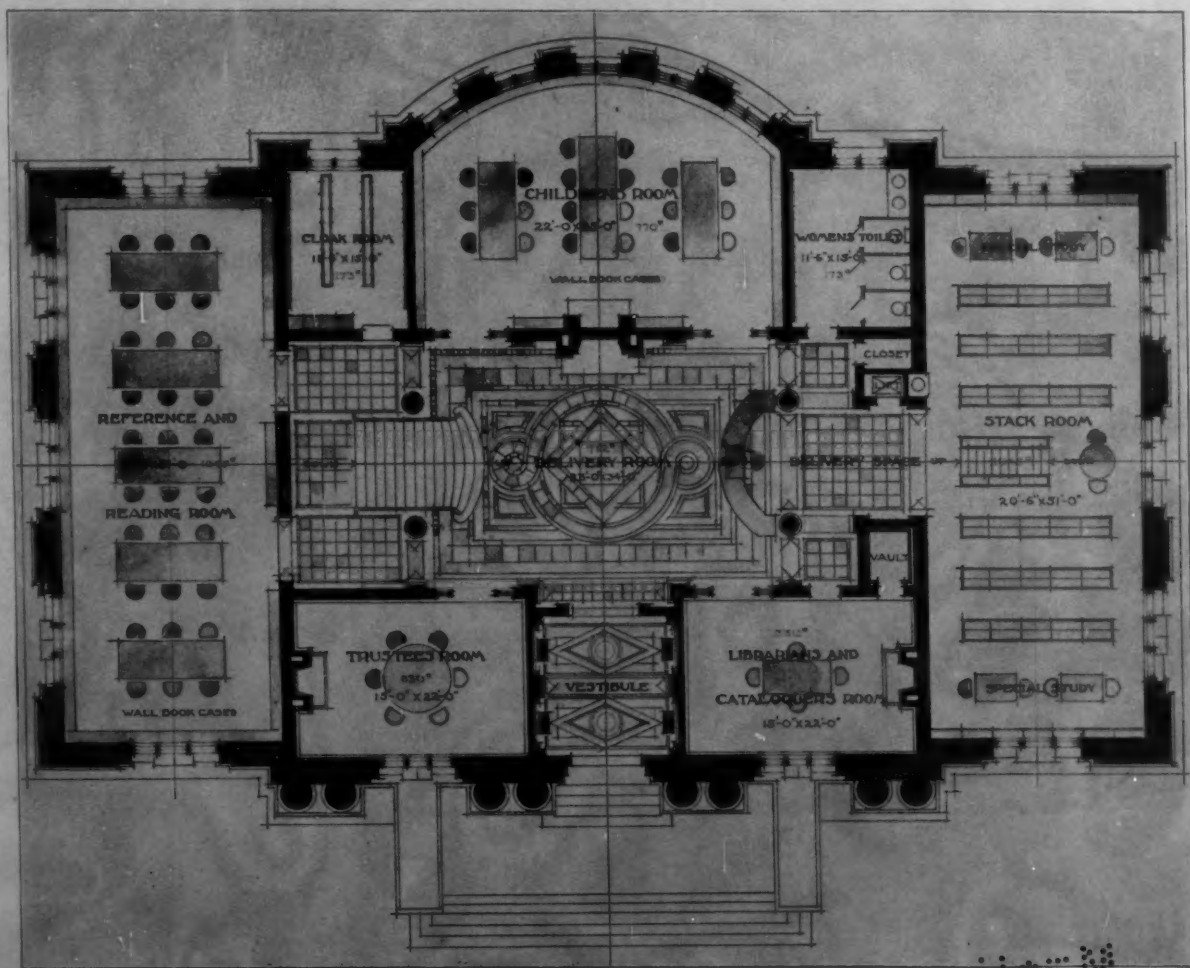


FIRST FLOOR PLAN.

PLANS.
COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
EDGAR V. SEELE, ARCHITECT.



104 M



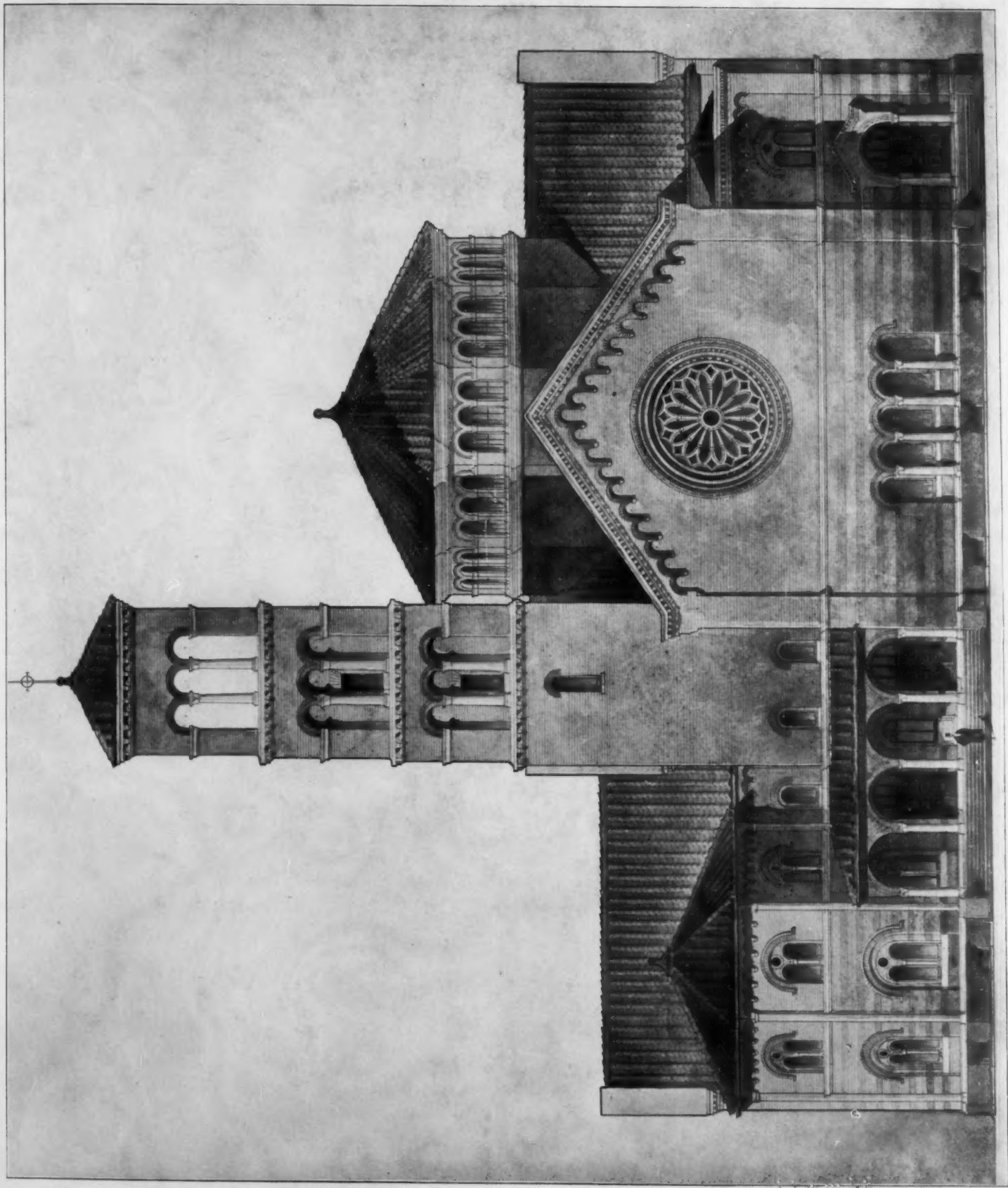
DESIGN FOR PUBLIC LIBRARY, YONKERS, N. Y.

DAVIS & SHEPARD, ARCHITECTS.

THE UNIVERSITY OF CHICAGO

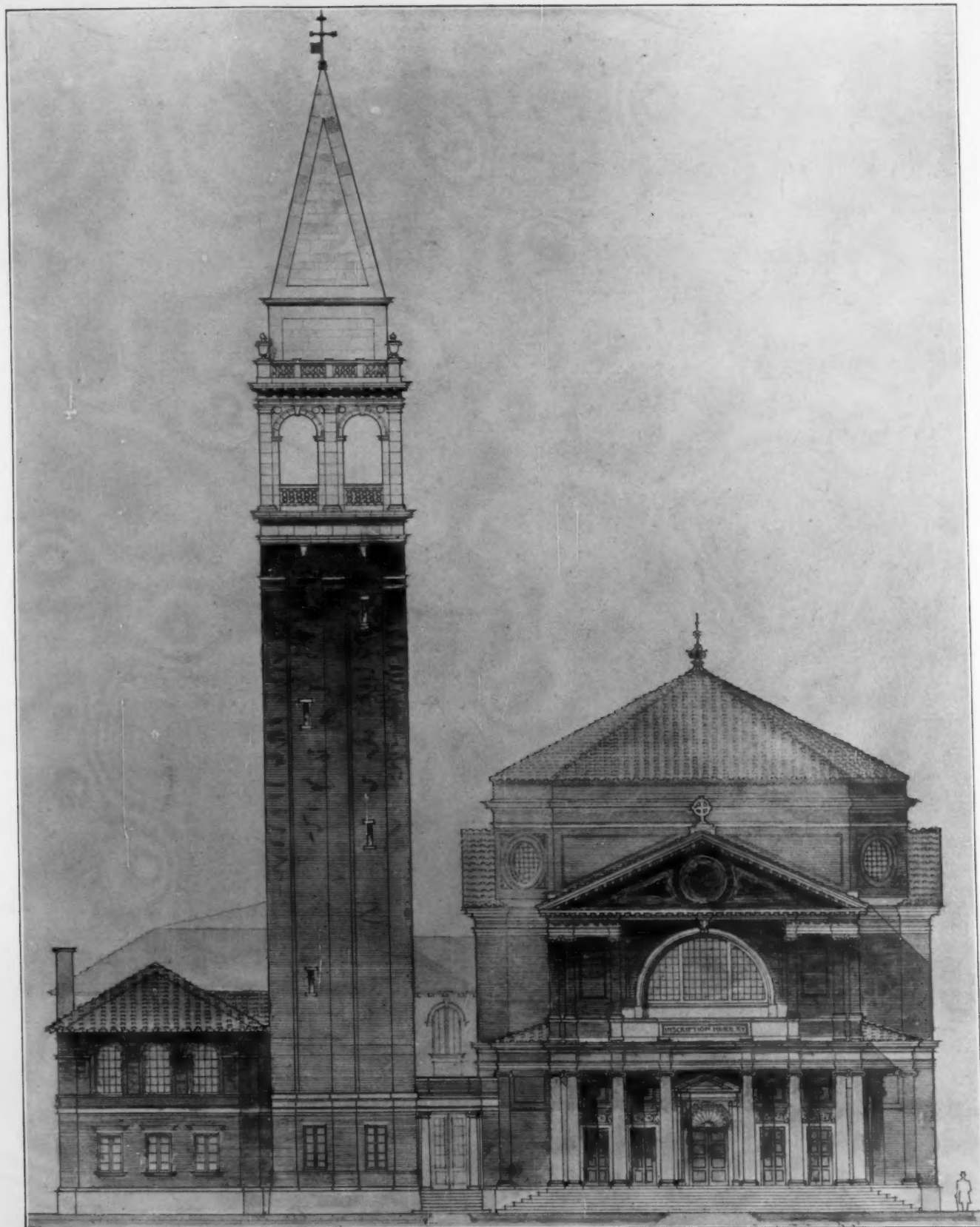
LIBRARY

U 70 U



COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
RANKIN & KELLOGG, ARCHITECTS.

UOLM



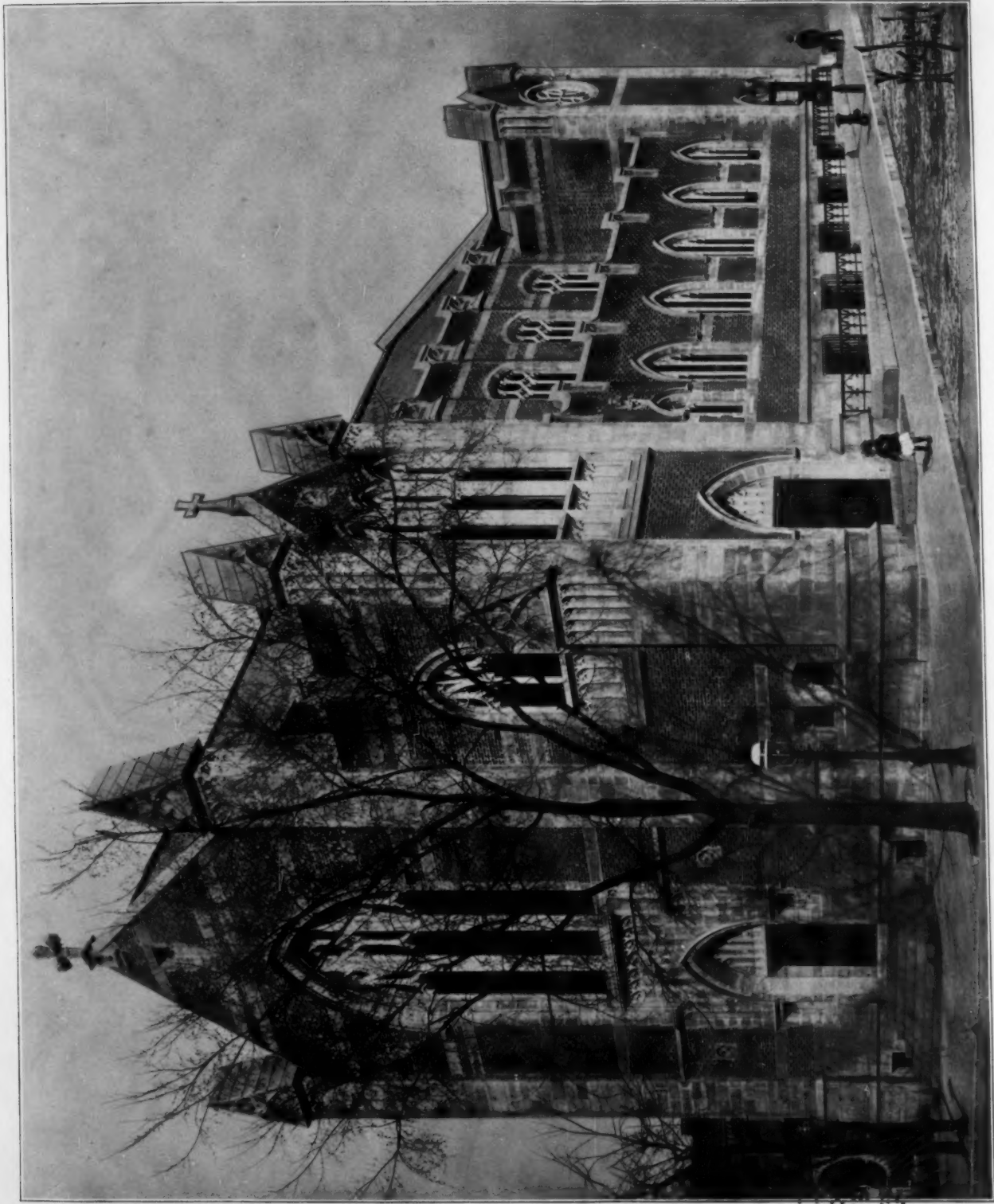
FRONT ELEVATION.
COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
WARREN, SMITH & BISCOE, ARCHITECTS.
(PLACED FIRST BY THE PROFESSIONAL ADVISER.)

M76U



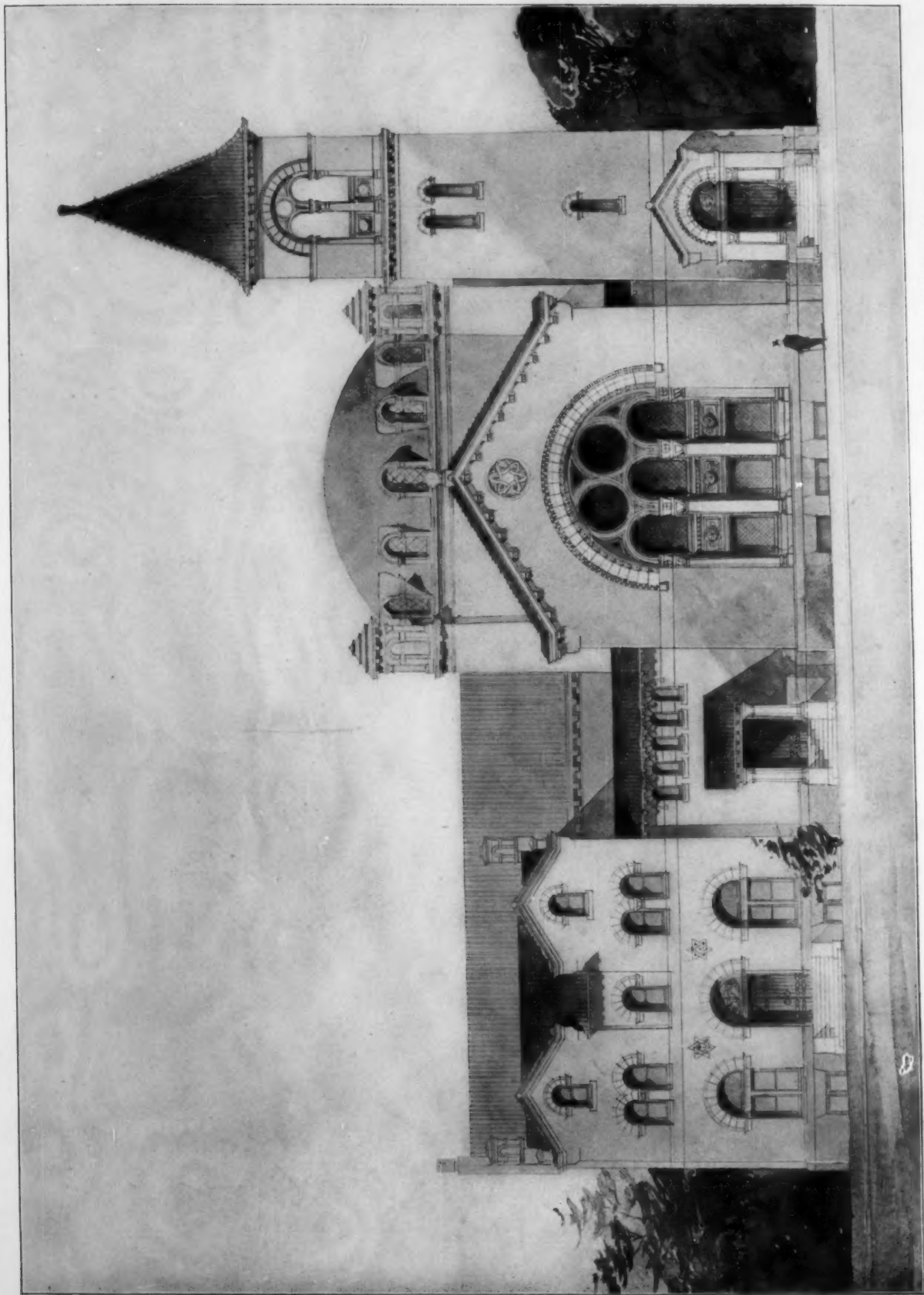
HOUSE, NO. 5 EAST 66TH STREET, NEW YORK CITY.
HUNT & HUNT, ARCHITECTS.

10101



CHURCH, 93RD STREET AND BROADWAY, NEW YORK CITY.
W. A. POTTER, ARCHITECT.

UOLM



COMPETITIVE DESIGN FOR BUILDING FOR THE FOUNDRY M. E. CHURCH, WASHINGTON, D. C.
 EDGAR V. SEELE, ARCHITECT.

100 M



COXE MEMORIAL HALL, ADMINISTRATION BUILDING, HOBART COLLEGE, GENEVA, N. Y.
CLINTON & RUSSELL, ARCHITECTS.



MEDBURY HALL, DORMITORY, HOBART COLLEGE, GENEVA, N. Y.
CLINTON & RUSSELL, ARCHITECTS.